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Principles of Accounts

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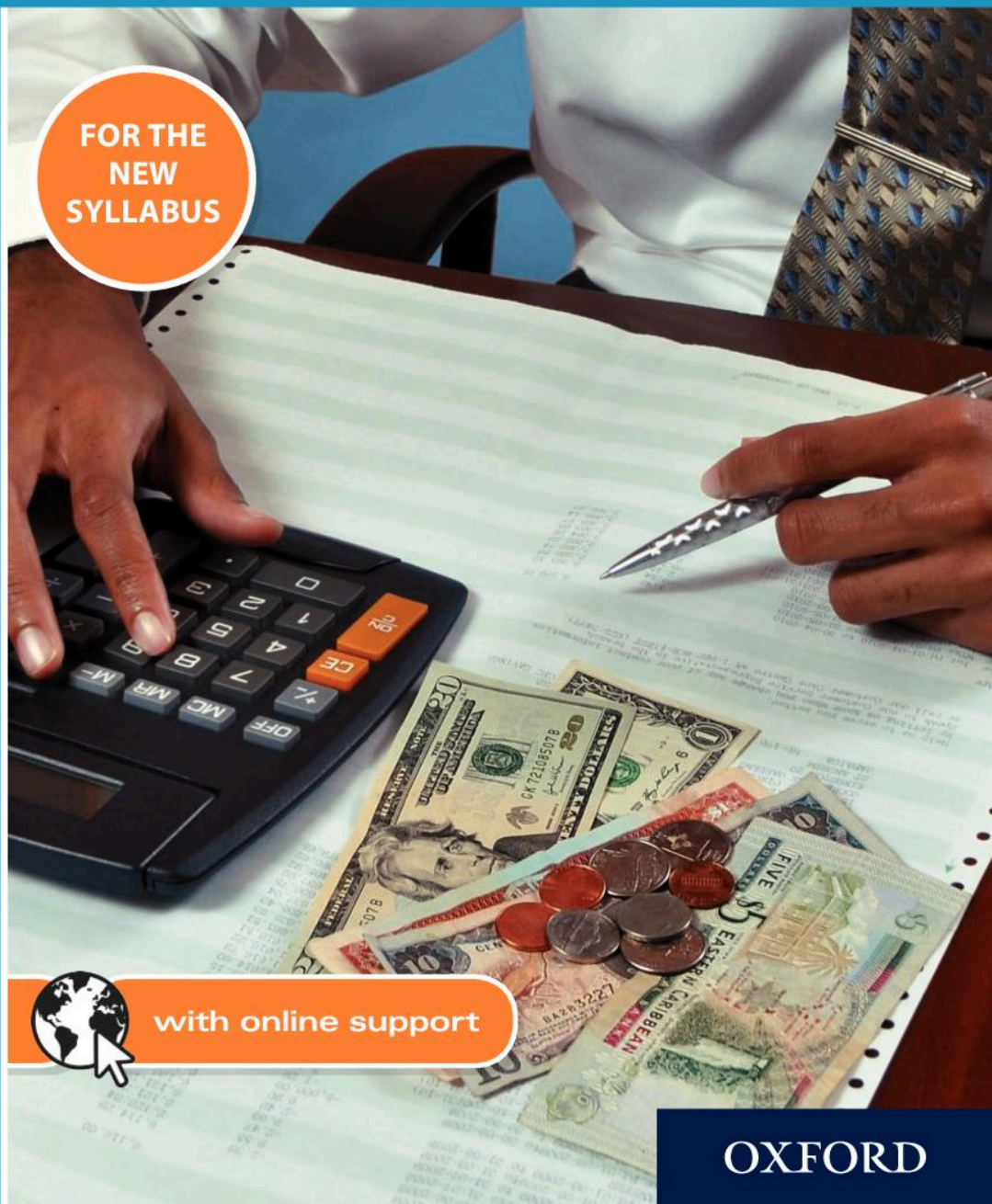

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Introduction

First, and most important, welcome to your study of accounting and to *Principles of Accounts for CSEC ®, 2nd edition*.

Principles of Accounts is an important business subject because it provides detailed coverage of the knowledge and techniques used to measure, process, evaluate and communicate information about financial performance. Studying Principles of Accounts will enable you to develop your numeracy, literacy and critical thinking skills, as well as prepare you for further study of accounting and for entry level employment in accounting and related careers.

This book has been designed to ensure complete and detailed coverage of the syllabus and to introduce the subject in a straightforward, easily accessible style. It assumes the reader has no prior knowledge of the subject. To aid learning, every unit is fully illustrated with explanatory notes to draw attention to key knowledge and the essential features of each accounting technique.

In addition, some special features have been included to provide all that the support teachers and students require and to ensure that students have every opportunity to develop their full potential:

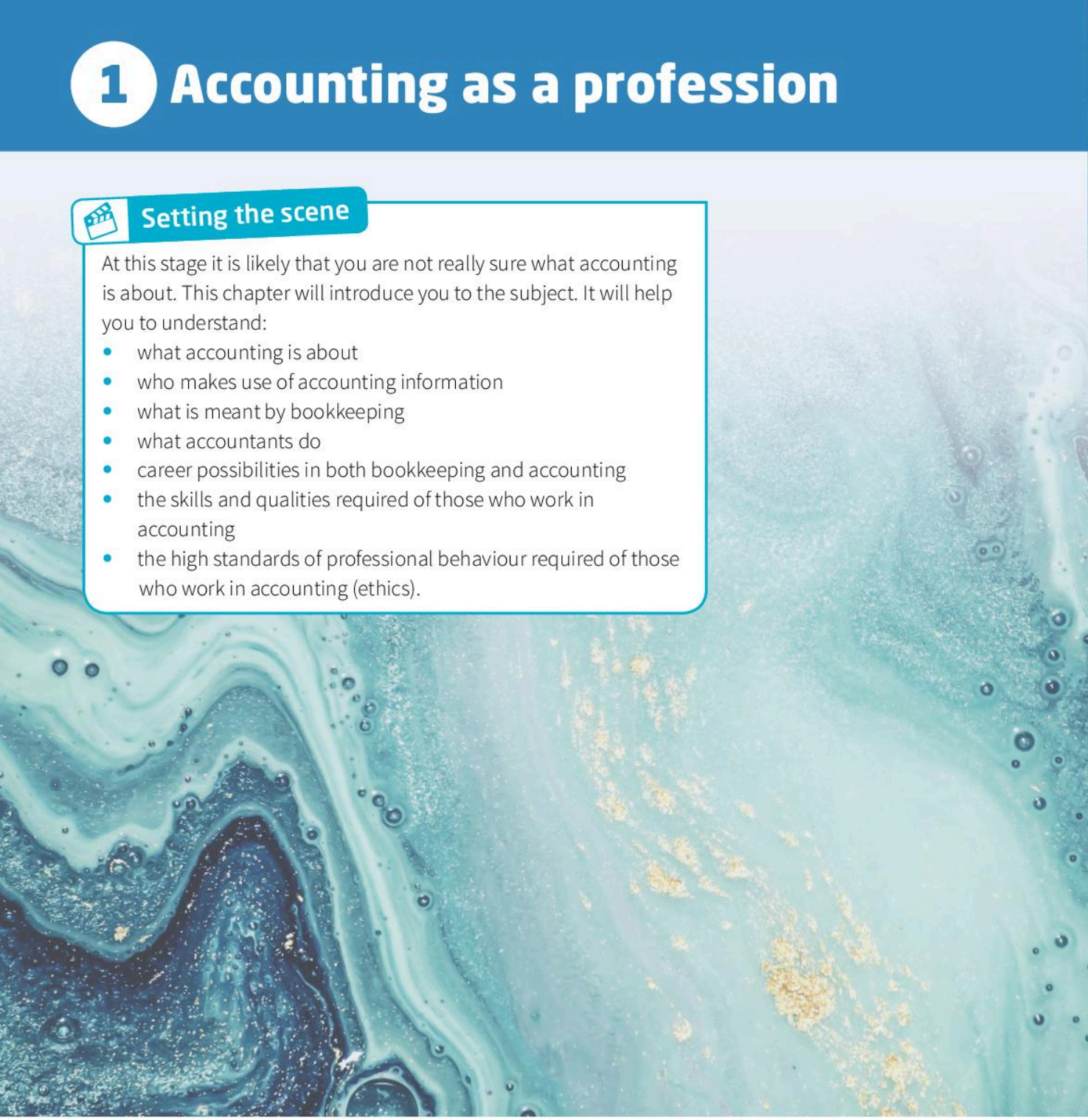
- An extensive range of questions, covering every aspect of the course, is provided. It is recognised that students cannot become proficient and confident in this subject without completing practice questions.
- Questions are almost always presented in pairs and are labelled with a brief description of the knowledge or skills being covered. This enables teachers to identify questions that can be used to demonstrate new learning in the classroom and provide students with follow-up practice questions covering the same ground to maximise their opportunity to learn effectively. In addition, the book contains case studies that give students the opportunity to practise a wide range of techniques covering a number of units.
- Throughout the book, special prominence is given to key terms and to tips, which emphasise important aspects of the subject and which give guidance on how to avoid common errors.
- Each chapter ends with a series of exam-style questions to give students the opportunity to prepare for Paper 1 and Paper 2. Additional exam-style questions can be found online at www.oxfordsecondary.com/9780198437260.
- All questions have been answered in full and these answers can be found online at www.oxfordsecondary.com/9780198437260.

1 Accounting as a profession

Setting the scene

At this stage it is likely that you are not really sure what accounting is about. This chapter will introduce you to the subject. It will help you to understand:

- what accounting is about
- who makes use of accounting information
- what is meant by bookkeeping
- what accountants do
- career possibilities in both bookkeeping and accounting
- the skills and qualities required of those who work in accounting
- the high standards of professional behaviour required of those who work in accounting (ethics).



Syllabus coverage

	Syllabus	Unit
1	Explain the concept and purposes of accounting	1.1
2	Identify the main users of accounting information	
3	Describe traditional and emerging careers in the field of accounting	1.2
4	Discuss ethical issues in the field of accounting	1.3

1.1 Introduction to accounting

Objectives

By the end of this unit you will be able to:

- explain the concept of accounting
- explain the purposes of accounting
- identify the main users of accounting information.

Concept and purposes of accounting

There is nothing new about keeping careful records of financial information. Even thousands of years ago people wanted to be well informed about what they received and spent, so that they could have some idea about whether they were well off or not. Nowadays these same questions apply to both individuals and organizations. In the case of businesses, the owners need to know:

- whether they are making a profit, because this is the main reason for engaging in business activity
- that they have enough money to pay all of their commitments on time
- that they are making the best use of the funds they have invested in the business.

In the modern world, business activity can be on a very large scale and very complex. Even a really simple form of business organization, for example a market stall, can involve a great deal of financial activity, including handling money, buying goods to sell, paying assistants, etc. Accounting is about providing accurate and comprehensive financial information to those involved in making decisions, so that businesses can survive, be successful and be run efficiently.

In order to provide this comprehensive financial information, it is necessary for the following to happen:

All financial transactions need to be recorded in a systematic way, so that the owner of a business, and other users, can be provided with the information they need to make the right decisions. This record-keeping aspect of accounting is often called **bookkeeping**.

From the bookkeeping records, which often contain vast amounts of detail, it is important to select, classify and summarise information, so that owners and other users can be given the appropriate information in the form of financial statements to help them manage the business effectively. The preparation of financial statements and providing some interpretation of what the statements reveal is often called **accounting**.

Key terms

Bookkeeping: the recording of financial information, particularly transactions, in a systematic way.

Accounting: the selecting, classifying and summarizing of financial data in ways that provide the owners of businesses (and others) with useful information to help them assess performance and plan future activities.

Key term

Stakeholders: individuals and organizations that have an interest in how a business performs.

The users of accounting information

Stakeholders are those who have an interest in a business. It is surprising just how many stakeholders are affected by even the most basic form of business and are therefore concerned about the business's financial situation. It is possible to divide stakeholders into two categories: those who work within the organization (internal stakeholders) and those whose involvement comes from outside the organization (external stakeholders).

For example, just thinking about your local store, the following stakeholders can be identified.

Internal stakeholders

- the *owner*, who has invested personal savings in setting up the business and who is dependent on the business's success for his or her livelihood
- the *manager*, who will be concerned about the business's performance so that any weaknesses can be identified, and plans put in place to rectify these
- *employees*, who are dependent on the success of the business for their wages or salary and for continued employment.

External stakeholders

- *customers*, who depend on the business being successful, so that they can rely on being able to buy goods as they need them
- *suppliers*, who provide goods for the business to sell and are concerned that they will be paid on time, and that the business will be successful, so that repeat, and perhaps increasingly large orders, are likely
- *the bank*, which may have lent the business funds to get started or develop. Any organization lending money will be concerned about the success of the business, because this affects whether repayments with interest will be made in accordance with the loan agreement
- *potential investors*, who will be concerned about the risk of investing and the potential returns
- *government and tax authorities*, who will need to know the amount of profit being made so that an accurate assessment can be made of tax due
- *competitors*, who will wish to compare their results with those of the store
- *local community*, will be concerned about the impact of the business on the local environment and also whether the business will provide employment opportunities.

It is important to remember that access to the financial statements of a business is in many cases very restricted. Sole traders and partnerships,

for example, do not have to provide details to external stakeholders other than the government and tax authorities.

Practice questions

1. Purpose of accounting

Explain the term "bookkeeping".

2. Purpose of accounting

Explain the term "accounting".

3. Stakeholders

Jarel has just opened a business selling fresh fruit from a market stall. He does all the work himself and he supplied all the finance to set up and run the business.

a. Identify *one* internal and *three* external stakeholders who will have an interest in this business.

b. State the interest in the business of *one* of the external stakeholders.

4. Stakeholders

Seema owns a chain of fashion stores worth several million dollars. She was recently able to expand the business with the help of a loan from a bank.

a. Identify *two* internal stakeholders other than Seema.

b. State why the bank who supplied the loan will be regarded as an external stakeholder.

c. Explain the interest the bank who supplied the loan will take in Seema's business.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

1.2 Traditional and emerging careers in accounting

Objectives

By the end of this unit you will be able to:

- identify the types of organization that use the skills of bookkeepers and accountants
- state the main duties, responsibilities, skills and qualities of a bookkeeper
- state the main duties, responsibilities, skills and qualities of an accountant
- describe some specialised and emerging careers in accounting.

Accounting skills are required in almost every organization. Here is a list of situations which gives some idea of the extensive range of possibilities:

- small-, medium- and large-scale businesses
- government departments
- professions: legal, real estate, medical, dental, veterinary
- finance: banking, insurance, investments
- hospitals, schools, colleges, universities
- charities
- sports and social clubs and other non-profit organizations.

Those with good accounting skills often play an important part in the management of organizations.

Careers as a bookkeeper

Duties and responsibilities	Skills required	Qualities required
• Preparing accounts by entering and posting transactions • Balancing accounts • Preparing trial balances • Verifying records and preparing reconciliation statements • Preparing reports • Storing documentation • Complying with legal requirements • Payroll records • Inventory records • Contributing to team effort • Work closely with, and assist, accountant	• Expertise in bookkeeping skills and techniques • IT skills (spreadsheets, accounting software packages) • Analytical skills (dealing with complexity) • Interpersonal skills (to maintain good relationships with colleagues, senior staff and clients) • Communication skills	• Integrity • Honesty • Reliability • Confidentiality • Accuracy • Thoroughness • Attention to detail • Keeping up to date

Many bookkeepers work as employees of organizations in their finance departments, but it is also possible to work for specialist firms which provide bookkeeping services for local businesses, or to be a self-employed bookkeeper maybe working from home. More experienced bookkeepers sometimes take on some of the responsibilities of an accountant.

Career examples

Traditional roles for the bookkeeper	Emerging roles for the bookkeeper
Accounts receivable clerk: keeps records of the amounts owed by each credit customer and may follow up overdue accounts	*Bookkeeping software specialist*: is highly skilled in the use of sophisticated software packages which are used to record business transactions
Payroll clerk: keeps records of the wages and salaries to be paid to employees, ensuring the accuracy of the amounts paid and that payments are made on time	*Payroll software operative*: is expert in the use of up-to-date software packages that are used to record details of each employee's pay, tax deductions, etc.

Careers as an accountant

Duties and responsibilities	Skills required	Qualities required
• Preparing financial statements that conform to legal requirements • Preparing reviews and budgets • Supervising work of bookkeeping staff, offering support and advice • Working with auditors (internal and external) • Analysing financial statements, making recommendations and providing advice on how to improve performance • Preparing tax assessments • Managing and developing financial systems and budgets	• Expertise in accounting skills and techniques • Expertise in IT • Analytical skills (dealing with complexity) • Leadership skills (to support staff, ensuring they are able to work to the best of their ability) • Communication skills (to ensure needs of clients are understood and met)	• Integrity • Honesty • Reliability • Confidentiality • Accuracy • Thoroughness • Attention to detail • Determination to keep up to date (for example, with legal/tax regulations)

Accountants can work in private practice and provide their services for local organizations, or individuals can work as employees within an organization, often occupying important positions as part of the management team.

Career examples

Traditional roles for the accountant	Emerging roles for the accountant
Accounts manager: leads the accounts department of an organisation and prepares financial information for executives on recent performance and for forecasting purposes	*Environmental accountant*: specialist in ensuring a business is environmentally responsible and profitable
Tax accountant: could work in a large organisation to ensure compliance with current tax regulations, or work in a self-employed capacity preparing tax returns and giving advice on taxation issues to local clients	*E-commerce specialist*: has expertise on internet regulations and can initiate and manage e-commerce projects
Internal auditor: whose job it is to provide an objective assessment of an organisation's financial systems and controls	*Accounting software developer*: researches and creates programs that meet the complex needs of particular organisations

The following are examples of areas in which accountants can specialise:

Financial accountant

- Provides information for stakeholders such as shareholders, investors, trade suppliers.
- Focuses on summarizing the organization's financial position, reporting on profitability, liquidity, solvency.

Financial accounting is required by law.

Management accountant

- Provides information internally to aid in decision-making.
- Undertakes budget analysis, financial planning and forecasting.

The emphasis is on financial planning in order to achieve the organization's goals.

Forensic accountant

- Detects and helps to prevent fraud.
- Uses a range of special skills to search for evidence of criminal conduct on behalf of insurance companies and lawyers.

Careers in other broadly financial occupations

Management

- *Payroll manager:* responsible for the work of an organisation's payroll department
- *Marketing manager*
- *Human resources (HR) manager*
- *Public relations manager*

Insurance

- *Actuary:* assesses the risk of an event occurring
- *Claims investigator:* works with those who have experienced an insured loss
- *Underwriter:* decides whether to provide insurance, how much risk to cover and what premiums to charge

Banking

- *Bank clerk:* works in the local branch of a bank interacting with private individuals and small businesses
- *Bank manager:* responsible for the work and staff of a local branch of a bank
- *Investment banker:* helps clients raise capital, assists with mergers and advises on investment opportunities

Entrepreneurship

- *Entrepreneurs design*, launch and run new (usually small) businesses and take on financial risks in the hope of making a profit. The range of possibilities is almost endless.

Practice questions

5. Careers in accounting

a. Identify *five* non-business and non-professional organizations that would employ bookkeepers.
b. State *three* responsibilities that you would expect to find on the job description of a bookkeeper working for a large charity.
c. Identify *three* qualities you would expect of a person applying to be a bookkeeper in your business.

6. Careers in accounting

a. Identify *three* types of professional organizations that would employ accountants.
b. State *three* responsibilities that you would expect to find on the job description of an accountant working for a large business organization.
c. Identify *three* skills you would expect of a person applying to be an accountant in your business.

7. Careers as an accountant

Explain *two* important differences in the work of a financial accountant and a management accountant.

8. Careers as an accountant

Explain the role of:

a. an auditor
b. a forensic accountant.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

1.3 Accounting ethics

Objectives

By the end of this unit you will be able to:

- identify the ethical principles of accounting
- explain how ethical principles should be applied
- identify the possible results of inappropriate application of ethical principles.

Key terms

Ethical principles of accounting: the moral principles and standards that govern the conduct of those working in the profession.

Integrity: being straightforward and honest in all professional and business relationships.

Objectivity: avoiding bias, conflicts of interest or the undue influence of others when making professional judgments.

Ethical principles of accounting

Looking ahead, imagine you are now working as a qualified accountant and your clients include a number of local businesses. What will your clients expect of you? The answer would, of course, include the use of your knowledge and technical expertise to prepare their financial statements, tax returns, etc. But over and above these technical matters it would be critical that they felt they could have complete trust in you.

What would it take for your clients to have complete trust in you? The answer to this question leads to an understanding of what are called **ethical principles of accounting**. Ethics is about moral principles and standards of behaviour. Ethical principles of accounting are the fundamental principles that accounting professionals choose to abide by to enhance their profession, maintain public trust, and demonstrate honesty and fairness.

Accountants have special ethical obligations. They have a responsibility to act in the public interest and comply with certain fundamental principles, which are: **integrity**, **objectivity**, **professional competence and due care**, **confidentiality** and **professional behaviour**.

Illustration 1

Ethical behaviour

One of your clients says that it is important that profits for this year are shown at the highest possible figure, because the client has plans to sell the business and wishes to create a favourable impression. The client suggests that the depreciation policy should be changed with a 20% charge used instead of the usual 25%.

You should not go along with this idea. You should point out that you are responsible for ensuring the client's accounts show a true and fair view of the business's performance.

Illustration 2

Objectivity

Referring again to the situation in Illustration 1, you should resist any pressure to make the business's performance look better than it is. You should point out that it is your professional duty to apply accounting concepts (such as consistency, accruals, prudence, etc.) to ensure that you provide reliable information.

Accountants must not allow bias, conflict of interest or the undue influence of others to override professional and business judgments.

Illustration 3

Professional competence and due care

One of your clients has asked your advice about a tax issue. It appears that the legislation on this issue has recently changed but you are not familiar with the changes in legislation.

You should not provide any advice at this stage. You should identify someone in the firm who has the knowledge to answer the query. If time permits, you should seek to update your own knowledge in this specialist field, perhaps asking permission to go on a training programme or making use of online support.

To exercise sound judgment an accountant must stay abreast with relevant laws, regulations and technical standards. Practising due care means when an accountant does not have expertise in an area they should consult with other professionals.

Illustration 4

Confidentiality

One of your clients, a local business, has recently been advertising for new staff. A friend of yours has applied for one of the posts and has asked you if you think the business is financially stable.

You should decline to comment on the financial stability of your client. You would point out that this information is confidential. You might suggest to your friend that they ask the question directly at the interview with the potential employer.

An accountant must not disclose any financial information of a client to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose. Also the accountant must not use the information for his or her personal advantage or for the advantage of third parties.

Key terms

Professional competence and due care: Keeping knowledge and skills at the appropriate level in order to deliver the services to clients diligently.

Confidentiality: avoiding the disclosure of information to others without permission; not using a client's information for personal advantage. (The only exceptions being where there are legal or ethical reasons to provide the information.)

Professional behaviour: taking personal responsibility for adopting the highest standards of the profession by complying with legal requirements and regulations and avoiding any action that would discredit the profession.

Illustration 5

Professional behaviour

You believe that the work of one of your team has been unfairly criticised by someone in the firm, who may have used emails to undermine the work of your colleague.

You should start by checking the facts. You will be concerned that the reputation of your firm could be damaged by these actions. If you can find sound evidence, you should consult with a more senior member of staff and seek their advice on how the matter should be dealt with.

Accountants must comply with relevant laws and regulations and avoid any action that discredits the profession.

As you can see from the illustrations, to maintain high ethical standards often requires real strength of character. It takes a degree of determination and courage to argue for the highest standards and to say no to anything which seems unethical. In some exceptional situations you may feel you must act as a "whistle-blower" – this is when you feel it is necessary to expose what you believe to be a dishonest or illegal activity within an organization.

Where accountants act inappropriately, serious consequences will follow. For example:

- inappropriate behaviour in the workplace, such as maligning a colleague, could lead to dismissal
- sharing information about a client with another client without their permission would lead to a loss of integrity
- failing to carry out work for a client satisfactorily due to a lack of technical expertise and up-to-date knowledge could lead to a law suit
- missing deadlines for filing tax documents with the authorities could lead to fines
- being found guilty of fraud could lead to imprisonment.

Practice questions

9. Ethical principles

Identify *one* ethical principle and explain what it means.

10. Ethical principles

Identify *a second* ethical principle and explain what it means.

11. Results of inappropriate application of ethical principles

Give *two* examples of the inappropriate application of ethical principles. State the possible consequences.

12. Results of inappropriate application of ethical principles

Give *two more* examples of the inappropriate application of ethical principles. State the possible consequences.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. Which of the following would you expect to be included in the duties of an accountant?
   - I. preparing budgets
   - II. working with auditors
   - III. analysing financial statements
     - A I and II only
     - B I and III only
     - C II and III only
     - D I, II and III
2. Which of the following would you expect to be included in the duties of a bookkeeper?
   - I. preparing trial balances
   - II. payroll records
   - III. developing financial systems
     - A I and II only
     - B I and III only
     - C II and III only
     - D I, II and III
3. Which one of the following is not an ethical principle of accounting?
   - A objectivity
   - B confidentiality
   - C consistency
   - D due care
4. Which of the following could result from inappropriate application of ethical principles?
   - I. fines
   - II. job loss
   - III. imprisonment
     - A I and II only
     - B I and III only
     - C II and III only
     - D I, II and III

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

2 Accounting as a system

Setting the scene

In this chapter you will discover the context for all the practical work you will be doing as you study accounting, including the following ideas:

- There are a set of rules, called concepts, which govern how things are done.
- There is a step-by-step process for recording financial data, called the accounting cycle.
- There are many different types of business organization for which you will be recording financial data.
- The day-to-day accounting records are used to produce certain key financial statements that help the owners of the business, and others, to understand how well the organization is performing.
- Technology plays a central role in helping with the recording of information and the production of financial statements.
- The statement of financial position (balance sheet), its components and how they are prepared.
- The different types of assets and liabilities and how the statement of financial position (balance sheet) changes as a result of various transactions.

You will develop your practical accounting skills. You will learn:

- about the fundamental elements of accounting – assets, liabilities and capital
- how to prepare a statement of financial position (balance sheet)
- about transactions and how these affect the information recorded on a statement of financial position (balance sheet)
- how to record transactions in ledger accounts
- how to check the accuracy of your record keeping by preparing a trial balance
- how to prepare simple income statements.

Syllabus coverage

	Syllabus	Unit
1	Outline the concepts and conventions that guide the accounting process	2.1
2	Describe the accounting cycle	
3	Appraise the accounting features of various types of business organizations	
4	Identify the main financial statements prepared by various business organizations	
5	Assess the role and impact of technology on the accounting process	
6	Explain the concept of a statement of financial position (balance sheet) and the statement of financial position (balance sheet) equation	2.2
7	Identify the components of a statement of financial position (balance sheet)	
8	Give examples of different types of assets and liabilities	
9	Construct statements of financial position (balance sheets)	
10	Determine which items in a statement of financial position (balance sheet) will change as a result of various transactions	2.3

2.1 Background to accounting

Objectives

By the end of this unit you will be able to:

- explain what is meant by concepts and conventions of accounting
- explain the term "accounting cycle" and state the key stages in the accounting cycle
- describe different types of business organization
- state the names of the main financial statements and their purposes
- describe the part played by technology in accounting.

Key terms

Accounting concepts and conventions (sometimes accounting principles): the set of accounting rules which ensure that users can have confidence in the information with which they are provided.

Accounting cycle: sequence of events and processes used to create the financial records of a business.

Books of original entry: books of first entry where transactions are listed prior to being posted to double-entry records. These are sometimes called books of prime (first) entry.

Ledger: a book in which accounts are kept.

Concepts and conventions of accounting

Accounting involves the processing and summarizing of considerable volumes of information by many individuals working for a variety of organizations, each with their own special needs and interests. As a result, you can imagine that there could be scope for financial records to be distorted or even manipulated. To ensure that accounting statements are prepared in the same way, whatever the situation, there are a set of rules, often referred to as **accounting concepts and conventions (and sometimes as accounting principles)**, which ensure that users can have confidence in the information with which they are provided. Some of the most important accounting concepts will be introduced to you as you work through this book. They are summarised and explained further in Chapter 6.

The accounting cycle

The **accounting cycle** is the name given to the sequence of events and processes that are used to develop the financial records of a business. The accounting cycle is going to be introduced gradually in the first half of this book and is summarised more fully in Unit 2.4. Briefly, the cycle is made up of the following stages:

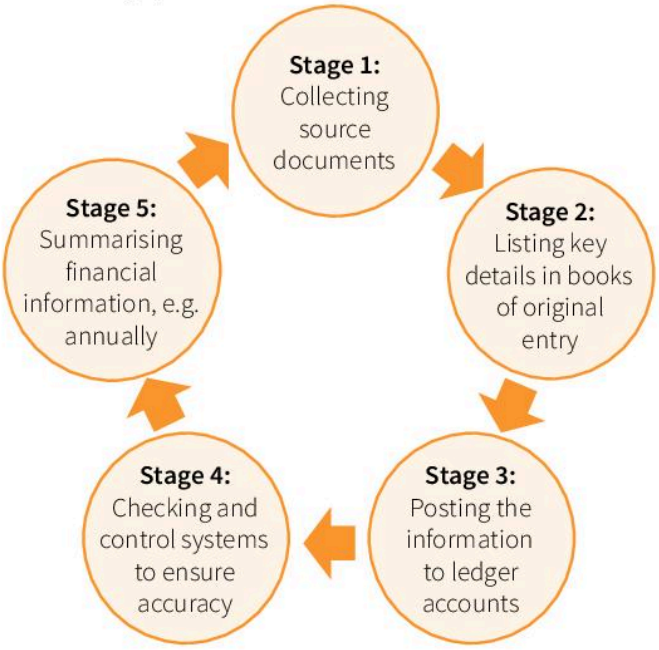
Stage 1: The collection of source documents that provide details for the financial records.

Stage 2: Listing the key details in **books of original entry**. There are separate books of original entry for credit sales, credit purchases, returns, cash and bank transactions, petty cash transactions and other miscellaneous transactions.

Stage 3: "Posting" the information shown in the books of original entry to **ledger** accounts. There are separate ledger accounts for each aspect of a business's finances. Bookkeeping involves the process of making two entries for every transaction in ledger accounts; this is often referred to as double-entry bookkeeping.

Stage 4: Checking and control systems to ensure arithmetical accuracy, for example preparing a trial balance.

Stage 5: Summarizing financial information, at least annually, in the form of income statements, statements of financial position (balance sheets), etc. These end-of-year financial statements provide the main means of judging how well a business has performed, leading to key decisions by owners, managers and other stakeholders about the future … and then back to the beginning again; hence the idea of an accounting cycle.



▲ The accounting cycle

Types of business organization

What is a business? Businesses are organizations that provide goods and/or services in order to make a profit. There are a number of ways of classifying businesses.

It is possible to think about businesses in terms of what they do, for example:

- providing raw materials through mining, farming, fishing, etc.
- manufacturing goods, turning raw materials into finished products
- selling goods to the general public (retailers) or to other businesses (wholesalers)
- providing services for other businesses and the general public.

It is also possible to think about businesses in terms of who owns them, for example:

Sole trader

A sole trader business is where one individual owns and controls the business. If successful, all the profits made by the business belong to this individual; if unsuccessful, the individual can lose whatever has been invested and private possessions, such as property and money.

Tip

You will find that much of this book is concerned with accounting for sole traders who are retailers or wholesalers. However, the principles of accounting that apply to these businesses also provide a sound basis for understanding the accounting records of other types of organization.

Link

Chapter 10 is concerned with the accounts of manufacturing organizations.

Link

Chapter 6 features service businesses.

Link

Chapter 8 features accounting for partnerships.

Link

Chapter 9 includes coverage of accounting for limited liability companies.

Link

Chapter 9 includes a unit covering accounting for co-operative societies and a unit featuring some aspects of accounting for non-profit organizations.

Key terms

Partnership: a form of business ownership when two or more individuals work together with the intention of making a profit.

Shareholders: the owners of the share capital of a limited company.

Directors: officials appointed by the shareholders to manage the company for them. A director can be, but does not have to be, a shareholder.

Partnerships

A **partnership** is where two or more individuals own the business. Partners jointly control the business, sharing profits between them. They are also jointly responsible for the debts of the business and can lose their private possessions if the business is unsuccessful.

Limited liability companies

Limited liability companies are companies owned by **shareholders** who each contribute to the funds needed to establish and run the company. Most shareholders do not take part in the day-to-day management and control of the company, but elect **directors** to undertake these responsibilities on their behalf. Shareholders are rewarded by receiving some of the profits made by the company if it is successful. Shareholders' responsibility for the debts of the company is limited to the amount they invest. Unlike sole traders and partners, shareholders are not at risk of losing their private funds if things go wrong.

Co-operatives

Co-operatives are organizations that are formed and controlled by members. They are run to provide their members with goods and services rather than to make a profit. When successful, co-operatives may reward their members in a number of ways, including some share of any surplus made, but usually surpluses are reinvested in the organization.

Non-profit organizations

These include clubs and societies that are formed by their members so that they can meet for particular activities, possibly social or sporting. These organizations do not aim to make a profit but have to be financially viable in order to survive.

Main financial statements

Owners, managers and other stakeholders will inspect the following financial statements.

For information about profit (or loss):

- The income statement (formed of various parts including a trading account and a statement of profit and loss) is the chief source of information about profits or losses for sole traders, partnerships and limited companies.
- In the case of co-operatives and non-profit organizations, information about surpluses or deficits (these words are used instead of profit and loss) is provided by an income and expenditure account.

For information about ability to meet commitments on time:

- The statement of financial position (balance sheet) provides details of the resources owned by the business that can be used to meet

commitments (cash and bank balances, money to be received in the near future, etc.) and some of the commitments (for example, amounts due to suppliers).
- Statements of financial position (balance sheets) are prepared by all the organizations listed above. In addition, limited companies are required to produce cash flow statements, which detail for the previous year the main sources of a company's cash and how that cash was used. (Note: cash flow statements are beyond the scope of this book.)

For information about the efficient use of resources:
- The statement of financial position (balance sheet) provides detailed information about all the resources owned by a business and, in conjunction with information about profits, can be used to reveal how successful, or otherwise, the owners and managers have been in using these resources well.

Technology and the accounting process

In the past, all bookkeeping and accounting systems were kept by hand (manually). Now computer technology provides electronic systems for keeping financial records, and these are used by the majority of business organizations. However, whether manual or computerised systems are used, it is important to realise that the records are based on the accounting cycle described above, and exactly the same principles are applied.

Accounting software

There are many different accounting software packages, but they all have certain key features in common:

Automatic processing

Source documents are the starting point for all accounting systems, whether manual or computerised. However, once the computer operator has selected the appropriate information from a source document and input the data into the software program, the other accounting processes become automatic, so that ledger accounts are instantly updated. Trial balances, income statements and statements of financial position (balance sheets) can be produced at any time on request. Accounting software systems closely follow the accounting cycle that you have been studying.

Integration of functions

Most software packages will not only automatically produce all the accounting records you are familiar with, they will also produce important records that are not normally part of any manual system. The most obvious example is the updating of inventory records after every

Here are some examples of accounting software packages among the many currently available:
- Sage software such as ACCPAC, Peachtree
- QuickBooks
- Microsoft Dynamics.

purchase and sale. Software programs often also include a facility to provide payroll records and produce documents such as invoices and credit notes.

Management information

Software packages are capable of providing the owner or manager of a business with extensive information that can help with running the business in an effective way. This information can be provided almost instantaneously and with almost no effort. A good example would be what is called an "aged receivable analysis". This means that, whenever required, a software program can provide a list of every receivable, how much is owed and how long the amount has been owed for, listed in such a way as to clearly show late payers. In a manual system, keeping track of outstanding debts can be such a time-consuming process that it does not get done often enough. As a result, a business using a software package has the opportunity to maintain much tighter control of its receivables.

From the employee's point of view

Introducing a computerised accounting system can bring many benefits to a business, but how would employees feel about this important change?

For some staff, the opportunity to learn new skills and receive free training is exciting. Some individuals realise that their own career and salary prospects are being developed because there is often a demand for more highly skilled staff. Other staff may feel threatened by these changes. They may feel that they will not be able to cope with learning new skills, and that they risk losing their jobs, especially if the introduction of the new systems is likely to lead to less work being available. Staff may be anxious about the health and safety issues which can arise when working with computers, for example eye strain and repetitive strain injury (RSI).

Special features of computerised accounting systems

Computerised accounting systems can include the following functions:

Inventory control

Every purchase, sale and return transaction can be used to automatically update records of inventories of every product. When inventories are checked physically, the computerised records can provide an important basis for comparison. Do the physical and computerised records agree? Is there evidence that items are missing?

Link

See Chapter 10 for more information about inventory.

Credit control

As well as producing reports on how long every receivable is taking to pay, a computerised system can produce reports on when each payable should be paid. This could be important if valuable cash discounts are not to be missed.

Payroll

Computer software programs can produce all the necessary detailed information about wage and salary calculations, pay slips, payroll registers, etc.

Link

See Chapter 11 for more information on payroll.

Management reports

Accounting systems can include trial balances, income statements, statements of financial position (balance sheets), ratio analysis and audit trails (reports that track the origins of figures in the accounting system, from the original source document through to figures in the end-of-year financial statements).

Other aspects of computerization

Once a business has computer systems, it will have access to some useful facilities.

Spreadsheets

Spreadsheets are programs that use a template formed of columns and rows on which it is possible to organise numerical information, make calculations and try out various scenarios with changes made automatically. Spreadsheets have become an invaluable tool for accountants, particularly those who are concerned with preparing budgets and forecasts.

Databases

Databases are programs that store data under various headings decided by the user. Databases can hold vast amounts of information and produce comprehensive reports on various aspects of a business's finances, for example sales performance.

The Internet

The Internet can provide an extensive range of online facilities that can support accounts and other important departments of a business, for example buying, selling and banking.

Main benefits of computerised accounting processes

Greater accuracy

Computer processes are automatic so they are error free. Of course, human error can still occur at the critical stage when data are input into the system or when formulas are used in a spreadsheet.

Greater speed

There is greater speed because record updating, calculations, etc. occur almost instantaneously.

Simultaneous updating

All records are updated from just one entry.

Improved accessibility

It is usually far easier to track down particular details in a computerised accounting system.

More information available

Reports on a wide range of matters can be produced with ease, meaning that those making decisions are much better informed.

Possibility of a reduction in staffing costs

Much of the work done in keeping the accounting system is automatic, so computerization can mean that there is a reduction in the number of staff required to keep the books of account. This can lead, in turn, to a saving in wages.

Potential disadvantages of computerised accounting systems

Capital expenditure

Installing a computerised accounting system can be expensive. The cost of the equipment and the software can be high. It is also likely that the hardware and the software will have to be upgraded quite often.

Training costs

When introducing a computerised accounting system, it is almost inevitable that staff will need training. From time to time, staff will also need training updates, adding to the costs.

Risk of data loss

Computer systems can "crash" and suffer from viruses. There can also be difficulties with keeping data secure.

Maintenance and support costs

Computer systems can go wrong and it is likely that businesses will experience an increase in maintenance costs and have to pay for technical support.

Period of transition

Businesses often find that it is necessary to run the old manual system alongside the new computerised system for at least a few months, to ensure that all goes well during the period of transition. This can place an additional strain on both staff and the business's resources.

Practice questions

1. Accounting concepts and conventions

Explain the purpose of accounting concepts and conventions.

2. The accounting cycle

List the main stages in the accounting cycle starting with "collecting source documents".

3. Types of business organization

State the main difference between a wholesaler and a retailer.

4. Types of business organization

Describe two key differences between sole trader and partnership businesses.

5. Identifying benefits and disadvantages of computerizing accounting records

Here is a list of possible benefits and disadvantages of computerizing accounting records. The items are in random order. In each case, decide whether the item should be considered an advantage (mark with an A) or a disadvantage (mark with a D) from the business's viewpoint.

	Item	A or D
a.	Cost of training	
b.	Improved accuracy	
c.	Aged receivables analysis	
d.	Automatic processing and updating	
e.	Computer virus	
f.	Technical support	

6. Identifying benefits and disadvantages of computerizing accounting records

Here is a list of possible benefits and disadvantages of computerizing accounting records. The items are in random order. In each case, decide whether the item should be considered an advantage (mark with an A) or a disadvantage (mark with a D) from the business's viewpoint.

	Item	A or D
a.	Management reports	
b.	Increased speed of processing	
c.	Reduced workload for staff	
d.	Cost of computer installation	
e.	Security breach ("hacking")	
f.	Frequency of software upgrades	

7. Organizing information about technology

Complete the following table to summarise the benefits and disadvantages of installing a computerised accounting system.

The points made should be from the viewpoint of the owner of the business. Each point made should be briefly described.

	Advantage	Disadvantage
Cost		
Staffing		
Information		

8. Organizing information about technology

Complete the following table to summarise the benefits and disadvantages of installing a computerised accounting system.

The points made should be from the viewpoint of the staff of the business. Each point made should be briefly described.

	Advantage	Disadvantage
Workload		
Career prospects		

2.2 Introducing the statement of financial position (balance sheet)

Objectives

By the end of this unit you will be able to:

- explain the terms asset, liability and capital
- explain and use the accounting equation
- prepare a simple statement of financial position (balance sheet)
- prepare a classified statement of financial position (balance sheet).

The concept of a statement of financial position (balance sheet)

In this unit you are going to learn how to prepare a simple version of a very important accounting statement called a statement of financial position (balance sheet). In order to do this, you are first going to learn about three accounting terms: assets, liabilities and capital. You are also going to learn that these three terms are connected to each other by a very simple formula or equation.

What are assets?

All businesses own resources such as cash, vehicles, furniture, premises. These resources are known as **assets**. The owner of a business will have provided or purchased each asset to ensure that the enterprise can trade or provide a service effectively.

Assets have a monetary value and provide a benefit to the owner.

Cash is an important asset for all businesses. Usually this asset is separated into two categories as follows:

- cash in hand: money in the form of notes, coins, cheques, etc. which are at the business premises (probably locked in the safe or in the cash register)
- cash at bank: all money which has been transferred by the owner of the business to the business's current account.

Some businesses provide goods or services on credit to their customers. This means that the customer agrees to pay for the goods or services at some time after they have been sold to the customer. The amount due from credit customers is referred to as **accounts receivable**.

You will notice that assets do not include employees! Assets have to be owned by the business.

Tip

The term "balance sheet" is now replaced by the more up-to-date term "statement of financial position". You are likely to come across both terms during your course of study.

Key terms

Asset: a resource with a monetary value that is owned by a business.
Accounts receivable: amounts owed by customers for goods and services supplied on credit (at one time referred to as trade debtors).

Tip

The term "accounts receivable" or "receivables" is now in common use and has replaced the older terms "debtors" and "trade debtors". Sometimes you will also find credit customers referred to as "trade receivables".

Tip

The terms payables and **accounts payable** are also relatively new. A few years ago the alternative terms "creditors" and "trade creditors" were more common. Sometimes you will also come across the term "trade payables" for credit suppliers.

Key terms

Liability: an amount owed by a business to other businesses, organizations or individuals.

Accounts payable: amounts due to suppliers of goods or services on credit (at one time referred to as trade creditors).

Capital: the investment made by the owner(s) of a business. It equates to the net value of the business.

Illustration 1

Assets

John owns a general store. His business assets include the following:

	$
Shop premises	200 000
Fittings and fixtures	20 000
Delivery vehicle	25 000
Goods for resale	18 000
Cash	5 000

What are liabilities?

Businesses often owe money to other businesses or organizations. Amounts owing to other businesses or organizations are called **liabilities**. For example, many businesses buy goods on credit from their suppliers. In other words, the goods are purchased but payment for them is made at some later date. The amounts of money a business owes to suppliers are referred to as payables or **accounts payable**.

Illustration 2

Liabilities

John's business has the following liabilities:

- accounts payable
- bank loan.

What is capital?

Businesses only exist because their owners have invested private funds in the business. As a result businesses then acquire the kinds of assets described above. Maybe other businesses and organizations also provide some finance – the liabilities also described above. The finance or investment provided by the owner is called **capital**.

Practice questions

9. Identifying assets, liabilities and capital

From the list below, identify which items are assets, which are liabilities and which are capital.

a. Vehicle
b. Shop fittings
c. Cash at bank
d. Bank loan
e. Owner's investment in the business
f. Inventory
g. Accounts receivable
h. Bank overdraft
i. Accounts payable
j. Machinery

10. Identifying assets, liabilities and capital

From the list below, identify which items are assets, which are liabilities and which are capital.

a. Cash in hand
b. Equipment
c. Amounts owing to suppliers
d. Furniture
e. Land
f. Loan from a friend
g. Value of owner's stake in the business
h. Amounts owed by customers
i. Cash at bank
j. Fittings

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

What is the accounting equation?

There is a simple link between the three elements: assets, liabilities and capital. This link, called the **accounting equation**, is based on the following idea:

- Each business has a number of assets. These assets have either been provided by the owner of the business (capital) or by using funds provided by other businesses or organizations (liabilities).
- It follows that whatever the scale of the business: Assets = Capital + Liabilities.

Key term

Accounting equation: links the three elements that are a feature of all businesses, i.e. assets, liabilities and capital. The equation is: Assets = Capital + Liabilities.

The accounting equation can be useful for calculating otherwise unknown facts about businesses. For example, if you know that a business has assets of $40 000 and liabilities of $5 000, it is possible to work out that the owner's capital must be $35 000:

	Assets	=	Capital	+	Liabilities
	$40 000	=	?	+	$5 000
So,	$40 000	=	$35 000	+	$5 000

Illustration 3

The accounting equation

John's general store has assets with a total value of $268 000. John provided $253 000 from his private resources to buy these assets; the remaining $15 000 of assets was purchased using a loan from the bank.

Summary: Assets $268 000 = Capital $253 000 + Liabilities $15 000

Illustration 4

Using the accounting equation

Faye owns a bookstore. The bookstore's assets total $170 000 and Faye invested $124 000 in the business as her capital. What are the bookstore's total liabilities?

	Assets	=	Capital	+	Liabilities
	$170 000	=	$124 000	+	?
So,	$170 000	=	$124 000	+	$46 000

The bookstore has total liabilities of $46 000.

The accounting equation can, therefore, be used to find out the value of assets, liabilities or capital, when any one of these is not known.

Practice questions

11. Using the accounting equation

The following table shows details about some businesses' total assets, total liabilities and capital. For each business calculate the missing figure, making use of the accounting equation.

	Total assets		Capital		Total liabilities
	Assets	=	Capital	+	Liabilities
	$		$		$
Business A	80 000				20 000
Business B	42 000				11 000
Business C	57 000		24 000		
Business D	650 000		490 000		
Business E			170 000		20 000
Business F			558 000		82 000

12. Using the accounting equation

The following table shows details about some businesses' total assets, total liabilities and capital. For each business calculate the missing figure, making use of the accounting equation.

	Total assets		Capital		Total liabilities
	Assets	=	Capital	+	Liabilities
	$		$		$
Business G	220 000				30 000
Business H	912 000				86 000
Business I	325 000		273 000		
Business J	560 000		483 000		
Business K			865 000		52 000
Business L			220 000		42 000

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

How to prepare a simple statement of financial position (balance sheet)

A statement of financial position (balance sheet) is a statement detailing a business's assets, liabilities and capital at a particular date. It provides information about a business's financial position on a specific date.

There are some precise rules about how a statement of financial position (balance sheet) should be prepared. The following example illustrates how these rules are applied.

Illustration 5

Preparing a simple statement of financial position (balance sheet)

The following information is available about John's General Store on 1 August 2018.

	$
Shop premises	240 000
Fittings and fixtures	30 000
Delivery vehicle	24 000
Inventory	18 000
Accounts receivable	4 000
Cash in hand	2 000
Cash at bank	10 000
Bank loan	40 000
Accounts payable	8 000

Step 1: Calculate the total value of assets: $328 000

Step 2: Calculate the total value of liabilities: $48 000

Step 3: Use the accounting equation to find the missing capital figure: $328 000 – $48 000 = $280 000

Step 4: Proceed to produce a statement of financial position (balance sheet), starting with a title. The title for a statement of financial position (balance sheet) usually includes the name of the business (or the name of the owner of the business). The correct wording for the title of a statement of financial position (balance sheet) is always: Statement of financial position (balance sheet) at a particular date. It is best to show the date in full, avoiding any abbreviations. In other words:

Statement of financial position (balance sheet) at 1 August 2018 is better than:

Statement of financial position (balance sheet) at 1/8/2018

John's General Store Statement of financial position (balance sheet) at 1 August 2018			

You will see that the statement of financial position (balance sheet) has two sides and that there are two columns on each side (four columns in all). On each side there is one column for recording details and one column for recording money values.

Key term

Statement of financial position (balance sheet): a statement which shows an organization's assets, liabilities and capital at a particular date which is usually prepared at the end of a financial period.

Step 5: Write a subheading "Assets" and list all the assets and their values in two columns on the left-hand side of the statement of financial position (balance sheet). The money column should be headed "$".

John's General Store Statement of financial position (balance sheet) at 1 August 2018			
	$		
ASSETS			
Shop premises	240 000		
Fittings and fixtures	30 000		
Delivery vehicle	24 000		
Inventory	18 000		
Accounts receivable	4 000		
Cash at bank	10 000		
Cash in hand	2 000		

Step 6: On the right-hand side of the statement of financial position (balance sheet), record the business's capital and liabilities. Start by writing "Capital" as a subheading and recording the value of capital ($280 000); head the money column "$". Now write the subheading "Liabilities" and list the liabilities and their values.

John's General Store Statement of financial position (balance sheet) at 1 August 2018			
	$		$
ASSETS		CAPITAL	280 000
Shop premises	240 000		
Fittings and fixtures	30 000	LIABILITIES	
Delivery vehicle	24 000	Bank loan	40 000
Inventory	18 000	Accounts payable	8 000
Accounts receivable	4 000		
Cash at bank	10 000		
Cash in hand	2 000		

Step 7: Record a total at the foot of each money column. The totals should appear on the same level.

John's General Store Statement of financial position (balance sheet) at 1 August 2018			
	$		$
ASSETS		CAPITAL	280 000
Shop premises	240 000		
Fittings and fixtures	30 000	LIABILITIES	
Delivery vehicle	24 000	Bank loan	40 000
Inventory	18 000	Accounts	8 000
Accounts receivable	4 000	payable	
Cash at bank	10 000		
Cash in hand	2 000		
	328 000		328 000

Note:

- In accounting statements, a final total is "double-ruled" as shown.

Practice questions

13. Preparing a simple statement of financial position (balance sheet)

Marlene is the owner of a retail unit. The following information is available about her business's assets and liabilities on 31 December 2018.

	$
Furniture and fittings	64 000
Cash at bank	8 000
Accounts payable	14 000
Inventory	36 000
Cash in hand	5 000
Bank loan	20 000
Accounts receivable	10 000

a. Calculate the total value of assets.
b. Calculate the total value of liabilities.
c. Use the accounting equation to calculate the business's capital.
d. Prepare a simple statement of financial position (balance sheet) at 31 December 2018.

14. Preparing a simple statement of financial position (balance sheet)

Andy owns a business selling bicycles and bicycle accessories. The following information is available about his business's assets and liabilities on 28 February 2018.

	$
Equipment	78 000
Cash at bank	15 000
Accounts payable	24 000
Inventory	33 000
Cash in hand	6 000
Bank loan	42 000
Accounts receivable	9 000

a. Calculate the total value of assets.
b. Calculate the total value of liabilities.
c. Use the accounting equation to calculate the business's capital.
d. Prepare a simple statement of financial position (balance sheet) at 28 February 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

How to prepare a classified statement of financial position (balance sheet)

The presentation of a statement of financial position (balance sheet) can be improved by dividing assets into two categories:

1. **Non-current assets:** these are assets which the business intends to keep and make use of for a long time (more than one year). Non-current assets include: premises, machinery, equipment, vehicles, furniture, fittings, etc.
2. **Current assets:** these are assets which are frequently changing in value, such as inventory, accounts receivable, bank and cash. So, any one item of inventory, or an amount owing from a particular credit customer, will only be an asset for the business for a short time (less than one year).

Assets are normally shown on statements of financial position (balance sheets) in a particular order. The order corresponds to how long the asset will belong to the business. So premises would be shown first, and cash in hand (which is, of course, constantly changing in value) will be shown last. This way of ordering assets is sometimes referred to as the **order of permanence**. The following guidance should help you place assets in the right order:

1. Non-current assets: place land first, followed by premises; thereafter, place other non-current assets in the order of their value (unless you happen to know a little more about how long the non-current assets will belong to the business).
2. Current assets: place current assets in the following order: inventory, accounts receivable, bank, cash.

Similarly, liabilities can be subdivided into two categories:

1. **Non-current liabilities:** amounts due which are likely to be repaid in a future financial period (after more than one year). Non-current liabilities would normally include bank loans.
2. **Current liabilities:** amounts due which will be repaid within the financial period (less than one year). An example of current liabilities is accounts payable.

It is also useful to the owner of a business if the statement of financial position (balance sheet) shows separate subtotals for non-current assets and current assets, and, if appropriate, for non-current liabilities and current liabilities.

Key terms

Non-current assets: assets that should be of benefit to the business for a long time (more than one year).

Current assets: assets that are quickly turned into cash and of benefit to the business for a short time (less than one year).

Order of permanence: the sequence used to list items on a statement of financial position (balance sheet), which begins with items which are likely to be the longest lasting and ending with items which are likely to be shortest lasting.

Non-current liabilities: liabilities that will be settled in the longer term (longer than one year). Sometimes referred to as a long-term liability.

Current liabilities: liabilities that will be settled in the near future (in less than one year).

Illustration 6

Preparing a classified statement of financial position (balance sheet) in order of permanence

Here is the statement of financial position (balance sheet) for John's general stores rewritten following the ideas about classified statements of financial position (balance sheets).

John's General Store
Statement of financial position (balance sheet) at 1 August 2018

	$	$		$
NON-CURRENT ASSETS			CAPITAL	280 000
Shop premises	240 000			
Fittings and fixtures	30 000		NON-CURRENT LIABILITIES	
Delivery vehicle	24 000		Bank loan	40 000
		294 000		
CURRENT ASSETS			CURRENT LIABILITIES	
Inventory	18 000		Accounts payable	8 000
Accounts receivable	4 000			
Cash at bank	10 000			
Cash in hand	2 000			
		34 000		
		328 000		328 000

Note:

- In this version of the statement of financial position (balance sheet) each side has two money columns. The first column is used to record the detail about individual items (in this case about non-current assets and current assets). The second column is used to show the subtotal for each category.

Link

The layout for the statement of financial position (balance sheet) described in this unit is sometimes referred to as a "horizontal" layout. In Chapter 5 you will be introduced to an alternative layout – the "vertical" form of presentation – which is now in common use.

Key term

Order of liquidity: the sequence used to list items on a statement of financial position (balance sheet) where items likely to last for the shortest time appear first and those which are likely to last for the longest time appear last.

A classified statement of financial position (balance sheet) can also be presented in **order of liquidity** rather than order of permanence. This means that the first assets shown on the statement of financial position (balance sheet) are money or assets which will become money very soon. The last assets to be shown on the statement of financial position (balance sheet) will be those least likely to become money in the near future, such as premises. In other words, items are shown in reverse order to that required for order of permanence (as in Illustration 6 above).

Illustration 7

Preparing a classified statement of financial position (balance sheet) in order of liquidity

Here is John's statement of financial position (balance sheet) redrafted but with items shown in order of liquidity.

John's General Store
Statement of financial position (balance sheet) at 1 August 2018

	$	$		$
CURRENT ASSETS			CURRENT LIABILITIES	
Cash in hand	2000		Accounts payable	8000
Cash at bank	10000			
Accounts receivable	4000		NON-CURRENT LIABILITIES	
Inventory	18000		Bank loan	40000
		34000		
NON-CURRENT ASSETS			CAPITAL	280000
Delivery vehicle	24000			
Fittings and fixtures	30000			
Shop premises	240000			
		294000		
		328000		328000

Tip

You may come across some older terms for the following during your studies:

- the old term "stock" is now called "inventory";
- the term "fixed assets" is now referred to as "non-current assets".
- "long-term liabilities" are now referred to as "non- current liabilities".

Practice questions

15. Preparing classified statements of financial position (balance sheets)

Donnie owns a business making computer software programmes. The following information is available about his business's assets and liabilities on 31 October 2018.

	$
Equipment	90000
Cash in hand	4000
Accounts payable	22000
Premises	300000
Bank loan (repayable 2024)	60000
Inventory	16000
Delivery vehicle	32000
Accounts receivable	14000
Cash at bank (overdrawn)	8000

a. Calculate the total value of assets.
b. Calculate the total value of liabilities.
c. Use the accounting equation to calculate the business's capital.
d. Prepare a classified statement of financial position (balance sheet) at 31 October 2018, setting out details in order of permanence.
e. Redraft the statement of financial position (balance sheet) at 31 October 2018 setting out details in order of liquidity.

16. Preparing classified statements of financial position (balance sheets)

Kisha owns a restaurant. The following information is available about her business's assets and liabilities on 31 January 2018.

	$
Restaurant premises	570 000
Bank loan repayable 2025	120 000
Furniture and fittings	45 000
Cash in hand	6 000
Equipment	51 000
Inventory (food, etc.)	24 000
Accounts payable	18 000
Accounts receivable	3 000
Loan from friend repayable March 2018	9 000
Cash at bank	12 000

a. Calculate the total value of assets.
b. Calculate the total value of liabilities.
c. Use the accounting equation to calculate the business's capital.
d. Prepare a classified statement of financial position (balance sheet) at 31 January 2018, setting out details in order of permanence.
e. Redraft the statement of financial position (balance sheet) at 31 January 2018 setting out details in order of liquidity.

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

2.3 The effect of transactions on a statement of financial position (balance sheet)

Objectives

By the end of this unit you will be able to:

- identify how a range of transactions – both cash and credit – affect items on the statement of financial position (balance sheet)
- record a set of transactions by preparing a sequence of statements of financial position (balance sheets).

Key terms

Transaction: a financial activity or financial event.

Cash transaction: a financial activity involving the use of money.

Credit transaction: a financial activity where the payment or receipt of money is delayed.

What are transactions?

A **transaction** is a financial activity. All businesses operate by buying, selling, spending money, receiving money, etc. Each purchase, sale, payment and receipt, is a transaction.

Many transactions involve the receipt or payment of money. These transactions are often referred to as **cash transactions**. Money transactions can involve notes and coins, cheques, credit cards, debit cards, online payment, etc. They are all referred to as cash transactions, whatever method has been used.

Credit transactions are those where the payment or receipt of money does not occur at the time of the transaction, but at some later date. For example, many businesses buy their goods for resale on credit from suppliers (a credit transaction) but pay their supplier later (a cash transaction). As you know, amounts owing to suppliers are recorded as "accounts payable" (or "payables") on a statement of financial position (balance sheet).

Here is another example of a credit transaction: some retailers sell their goods on credit to customers (a credit transaction) and receive payment from the customer some time later (a cash transaction). As you know, amounts owed by customers are recorded as "accounts receivable" (or "receivables") on a statement of financial position (balance sheet).

Next you are going to learn how the value of individual items shown on statements of financial position (balance sheets) change as a business continues its operations.

How transactions affect statement of financial position (balance sheet) items

Every time a transaction occurs, items on a statement of financial position (balance sheet) will change. Of course, whatever the transaction, the accounting equation (see Unit 2.2) will always apply.

In the following illustrations, you can see how a variety of transactions affect the statement of financial position (balance sheet) of one business over a period of a few days. The illustrations include both cash and credit transactions. They show transactions that affect:

- assets only
- assets and liabilities
- assets and capital.

Illustration 8

A business purchases a vehicle for $15 000 and pays by cheque

The summarised statement of financial position (balance sheet) of a business on 1 December 2017 was as shown below.

Statement of financial position (balance sheet) at 1 December 2017

	$		$
ASSETS		CAPITAL	70 000
Equipment	25 000		
Bank	45 000		
	70 000		70 000

On 2 December 2017 the owner of the business purchased a vehicle for use by the business and paid by a cheque for $15 000.

Step 1: Work out how the transaction affects items on the statement of financial position (balance sheet):

- A new asset will appear on the statement of financial position (balance sheet): vehicle +$15 000.
- The asset bank will have to be reduced because a payment has been made: bank –$15 000.

So the business has exchanged one asset for another asset. You will notice that the capital figure of $70 000 is not affected by this transaction. This is because the value of the owner's investment in this business has not changed. All that has happened is that one asset has been exchanged for another asset – the total assets are still worth $70 000.

Step 2: Redraft the statement of financial position (balance sheet) after the transaction has occurred.

Statement of financial position (balance sheet) at 2 December 2017

	$		$
ASSETS		CAPITAL	70 000
Equipment	25 000		
Vehicle	15 000		
Bank	30 000		
	70 000		70 000

Did you notice that two items on the statement of financial position (balance sheet) were affected by the transaction?

Illustration 9

The business purchases some furniture, value $10 000, on credit

On 3 December, the business purchased some furniture, value $10 000, on credit.

Step 1: Work out how the transaction affects items on the statement of financial position (balance sheet):

- A new asset will appear on the statement of financial position (balance sheet): furniture +$10 000.
- A liability will appear on the statement of financial position (balance sheet): payable +$10 000.

In this transaction, the business has acquired one more asset (hence an increase in the value of assets). However, rather than paying for it immediately, it has purchased the asset on credit (that is, delayed paying until some future date). So the business now has a liability (that is, an account payable). Once again, you will notice there is no change to the figure for capital. This is because the business has acquired an extra asset and a liability, so the net value of the business has not changed.

Step 2: Redraft the statement of financial position (balance sheet) after the transaction has occurred.

Statement of financial position (balance sheet) at 3 December 2017			
	$		$
ASSETS		CAPITAL	70 000
Equipment	25 000		
Vehicle	15 000		
Furniture	10 000	LIABILITY	
Bank	30 000	Account payable	10 000
	80 000		80 000

Once again, two items on the statement of financial position (balance sheet) were affected by this transaction.

Illustration 10

The owner takes $1 000 from the bank account for private use

On 4 December, the owner of the business withdrew $1 000 from the business's bank account for private use. The withdrawal of money from the business by the owner for private use is called **drawings**.

Step 1: Work out how the transaction affects items on the statement of financial position (balance sheet):

- The asset bank will be reduced by $1 000: bank – $1 000.
- The owner's investment in the business will be reduced by $1 000: capital – $1 000.

In this transaction, the value of one of the business's assets has been reduced. At the same time, the owner has deliberately reduced the amount invested in the business, so capital has been reduced.

Step 2: Redraft the statement of financial position (balance sheet) after the transaction has occurred.

Statement of financial position (balance sheet) at 4 December 2017			
	$		$
ASSETS		CAPITAL	69 000
Equipment	25 000		
Vehicle	15 000		
Furniture	10 000	LIABILITY	
Bank	29 000	Account payable	10 000
	79 000		79 000

Once again, did you notice that two items on the statement of financial position (balance sheet) were affected by the transaction?

Illustration 11

The account payable is paid $6 000 by cheque

On 5 December a payment of $6 000 was made to an account payable.

Step 1: Work out how the transaction affects items on the statement of financial position (balance sheet):

- The asset bank will be reduced by $6 000: bank – $6 000.
- The amount owed to the accounts payable will be reduced by $6 000: accounts payable – $6 000.

Key term

Drawings: the removal of resources (usually money) from the business for the private use of the owner.

Tip

Just very occasionally a transaction can affect three items on a statement of financial position (balance sheet), rather than the normal two. A good example would be the purchase of a non-current asset (say a vehicle) when a deposit is paid in cash, but an agreement is reached to pay the remaining amount due at a later date. Can you see that three items would change on a statement of financial position (balance sheet)? These items are: vehicles, bank and accounts payable. For the moment, however, all the transactions you will encounter will affect just two items on a statement of financial position (balance sheet).

The payment reduced the value of one of the business's assets. At the same time, the amount owed by the business fell, so liabilities were reduced. In this transaction, there is no effect on capital, because the net value of the business has not changed.

Step 2: Redraft the statement of financial position (balance sheet) after the transaction has occurred.

Statement of financial position (balance sheet) at 5 December 2017			
	$		$
ASSETS		CAPITAL	69 000
Equipment	25 000		
Vehicle	15 000		
Furniture	10 000	LIABILITY	
Bank	23 000	Account payable	4 000
	73 000		73 000

You will know by now that, whatever the transaction, two items on the statement of financial position (balance sheet) will be affected. You will find that this is generally true for any transaction.

Illustration 12

Some more typical transactions

The table below gives some more examples of transactions and how each of these would affect a statement of financial position (balance sheet).

Examples of transactions and how these would affect a statement of financial position (balance sheet)				
		Assets	= Capital	+ Liabilities
1	An individual started a business by paying $35 000 into a bank account	Bank + $35 000	Capital + $35 000	
2	Machinery, value $12 000, was purchased on credit	Machinery + $12 000		Accounts payable + $12 000
3	Purchased equipment, value $5 000, and paid by cheque	Equipment + $5 000 Bank – $5 000		
4	Borrowed $20 000 from the bank as a long-term loan	Bank + $20 000		Bank loan + $20 000
5	Owner withdrew a cheque for $4 000 for private use	Bank – $4 000	Capital – $4 000	
6	Paid an account payable $2 000 by cheque	Bank – $2 000		Accounts payable – $2 000

Practice questions

17. Recording transactions using statements of financial position (balance sheets)

Adam opened his business on 1 March 2018. His business's first statement of financial position (balance sheet) is shown below.

Adam's Hardware Store
Statement of financial position (balance sheet) at 1 March 2018

	$		$
ASSETS		CAPITAL	40 000
Vehicle	12 000		
Bank	28 000		
	40 000		40 000

In the first few days the business was in operation, the following transactions occurred:

March
2 Purchased equipment for $15 000, paid by cheque
3 Purchased furniture for $8 000 on credit
4 Borrowed $15 000 from the bank. These funds were paid into the business's bank account
5 Adam withdrew a cheque for $3 000 for private use
6 Paid an account payable $6 000 by cheque

Prepare an updated statement of financial position (balance sheet) after each transaction.

18. Recording transactions using statements of financial position (balance sheets)

Tiffany opened a business on 1 January 2018. Her business's first statement of financial position (balance sheet) was as follows.

Tiffany
Statement of financial position (balance sheet) at 1 January 2018

	$		$
ASSETS		CAPITAL	110 000
Premises	90 000		
Bank	20 000		
	110 000		110 000

In the first few days the business was in operation, the following transactions occurred:

Jan 2 Purchased a vehicle for $15 000, paid by cheque
3 Borrowed $12 000 from the bank. The funds were paid into the business's bank account
4 Purchased equipment for $24 000 on credit
5 Tiffany made an additional investment in her business of $8000. The funds were paid into the business's bank account
6 Paid an account payable $20 000 by cheque

Prepare an updated statement of financial position (balance sheet) after each transaction.

19. Identifying how transactions affect statements of financial position (balance sheets)

In the following table, recalculate the figures for total assets, capital and total liabilities after each transaction has occurred. (As an example, the effect of the first transaction has already been worked out.)

		Total assets A $	Capital = C $	Total liabilities + L $
Starting figures		40 000	30 000	10 000
a.	Owner withdrew a cheque for $4 000 for private use	36 000	26 000	10 000
b.	Purchased new vehicle for $16 000 on credit			
c.	Repaid $2 000 of a loan from the bank. The funds were taken from the business's bank account			
d.	Purchased some machinery for $7 000 and paid by cheque			
e.	Paid an account payable $5 000 by cheque			
f.	Sold some equipment worth $3 000 and received a cheque for this amount			

20. Identifying how transactions affect the statement of financial position (balance sheet)

In the following table, recalculate the figures for total assets, capital and total liabilities after each transaction has occurred. (As an example, the effect of the first transaction has already been worked out.)

		Total assets A $	Capital = C $	Total liabilities + L $
Starting figures		90 000	75 000	15 000
a.	Paid an account payable $8 000 by cheque	82 000	75 000	7 000
b.	Purchased a new vehicle and paid $17 000 by cheque			
c.	Owner withdrew a cheque for $1 000 for private use			
d.	Purchased some new equipment for $10 000 on credit			
e.	Repaid part of a bank loan $6 000. The funds were taken from the business's bank account			
f.	Some old machinery worth $6 000 was sold on credit for this amount			

21. Comparing statements of financial position (balance sheets) to see what transactions have occurred

Here is a series of statements of financial position (balance sheets) for one business. By comparing a statement of financial position (balance sheet) with the previous statement of financial position (balance sheet), you should be able to work out what transaction has occurred.

The first answer has been shown as an example.

Statement of financial position (balance sheet) at 1 February 2018			
	$		$
ASSETS		CAPITAL	60 000
Bank	60 000		

Statement of financial position (balance sheet) at 2 February 2018			
	$		$
ASSETS		CAPITAL	60 000
Vehicle	18 000		
Bank	42 000		
	60 000		60 000

Answer: A vehicle has been purchased for $18 000 and this was paid for by cheque.

Now work out the transactions that occurred on 3, 4 and 5 February.

Statement of financial position (balance sheet) at 3 February 2018			
	$		$
ASSETS		CAPITAL	57 000
Vehicle	18 000		
Bank	39 000		
	57 000		57 000

Statement of financial position (balance sheet) at 4 February 2018			
	$		$
ASSETS		CAPITAL	57 000
Vehicle	18 000		
Equipment	16 000	LIABILITY	
Bank	39 000	Accounts payable	16 000
	73 000		73 000

Statement of financial position (balance sheet) at 5 February 2018			
	$		$
ASSETS		CAPITAL	57 000
Vehicle	18 000		
Equipment	16 000	LIABILITY	
Bank	33 000	Accounts payable	10 000
	67 000		67 000

22. Comparing statements of financial position (balance sheets) to see what transactions have occurred

Here is a series of statements of financial position (balance sheets) for one business. By comparing a statement of financial position (balance sheet) with the previous statement of financial position (balance sheet), you should be able to work out what transaction has occurred.

The first one has been done for you.

Statement of financial position (balance sheet) at 1 December 2017

	$		$
ASSETS		CAPITAL	92 000
Bank	92 000		

Statement of financial position (balance sheet) at 2 December 2017

	$		$
ASSETS		CAPITAL	92 000
Equipment	22 000		
Bank	92 000	LIABILITY	
		Accounts payable	22 000
	114 000		114 000

Answer: Some equipment has been purchased on credit for $22 000.

Now work out the transactions that occurred on 3, 4, 5 and 6 December.

Statement of financial position (balance sheet) at 3 December 2017

	$		$
ASSETS		CAPITAL	92 000
Equipment	22 000		
Bank	107 000	LIABILITY	
		Bank loan	15 000
		Accounts payable	22 000
	129 000		129 000

Statement of financial position (balance sheet) at 4 December 2017

	$		$
ASSETS		CAPITAL	92 000
Equipment	16 000		
Receivable	6 000	LIABILITY	
Bank	107 000	Bank loan	15 000
		Accounts payable	22 000
	129 000		129 000

Statement of financial position (balance sheet) at 5 December 2017			
	$		$
ASSETS		CAPITAL	92 000
Equipment	16 000		
Accounts receivable	3 000	LIABILITY	
Bank	110 000	Bank loan	15 000
		Accounts payable	22 000
	129 000		129 000

Statement of financial position (balance sheet) at 6 December 2017			
	$		$
ASSETS		CAPITAL	92 000
Equipment	16 000		
Accounts receivable	3 000	LIABILITY	
Bank	99 000	Bank loan	15 000
		Accounts payable	11 000
	118 000		118 000

23. Further practice at recording transactions using statements of financial position (balance sheets)

Leo opened a hardware store on 1 March 2018. The business's statement of financial position (balance sheet) on that date was as follows.

Leo Statement of financial position (balance sheet) at 1 March 2018			
	$		$
ASSETS		CAPITAL	32 900
Equipment	14 100		
Bank	28 200	LIABILITY	
Cash	600	Bank loan	10 000
	42 900		42 900

In the first few days the business was in operation, the following transactions occurred:

Mar 2 Purchased a delivery van on credit for $19 600
3 Purchased shop fittings for $7 200 and paid by cheque
4 Leo withdrew $500 cash for private use
5 Leo sold some of the equipment, value $2 400, for that amount on credit
6 Paid an account payable $11 500 by cheque
7 Received a cheque for $1 200 from an account receivable

Prepare an updated statement of financial position (balance sheet) after each transaction. The last statement of financial position (balance sheet) (at 7 March) should be set out as a fully classified statement of financial position (balance sheet). Assume the bank loan is not repayable until 2022.

24. Further practice at recording transactions using statements of financial position (balance sheets)

Anita owns a hairdressing business that she opened on 1 April 2018. The business's statement of financial position (balance sheet) on that date was as follows.

Anita
Statement of financial position (balance sheet) at 1 April 2018

	$		$
ASSETS		CAPITAL	17 600
Equipment	11 000		
Accounts receivable	2 900	LIABILITY	
Bank	6 300	Accounts payable	3 400
Cash	800		
	21 000		21 000

In the first few days the business was in operation, the following transactions occurred:

Apr 2 Purchased some additional equipment on credit for $4 100
3 Received $200 cash from an account receivable
4 Arranged a long-term bank loan for $9 000. The funds were paid into the business's bank account
5 Anita withdrew $400 cash for private use
6 Sold some unwanted equipment, value $1 500, for that amount on credit
7 Paid an account payable $6 200 by cheque

Prepare an updated statement of financial position (balance sheet) after each transaction. The last statement of financial position (balance sheet) (at 7 April) should be set out as a fully classified statement of financial position (balance sheet).

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

2.4 Preparing simple ledger accounts

Objectives

By the end of this unit you will be able to:

- record transactions using "T" accounts
- use the terms "debit" and "credit" when recording transactions
- prepare ledger accounts making detailed entries.

In this unit you are going to start to use ledger accounts for recording transactions. First, however, you will get used to using accounts in their simplest form: the "T" account. You will then start to prepare more detailed accounts – ledger accounts. There are some important rules about how to use accounts and how to make entries in these accounts.

Using "T" accounts

You know from Unit 2.3 that it is possible to record transactions by using a succession of statements of financial position (balance sheets). However, you will also realise that this is an inefficient and rather laborious method of keeping accounting records. To make the process a great deal easier, accounts are used. An account is a two-sided form and is referred to as a **"T" account**, because of its shape.

The process is as follows.

Step 1: Prepare a "T" account for each asset, each liability and capital shown on a statement of financial position (balance sheet).

Illustration 13

Setting up some "T" accounts

Dale owns a village store. The business's statement of financial position (balance sheet) on 1 May 2018 was as follows.

Dale
Statement of financial position (balance sheet) at 1 May 2018

	$		$
ASSETS		CAPITAL	40 000
Equipment	37 000		
Bank	8 000	LIABILITY	
		Accounts payable	5 000
	45 000		45 000

Link

The rest of this chapter covers aspects of Sections 4 and 5 of the syllabus: preparing simple ledger accounts (Units 2.4 and 2.5); preparing trial balances (Unit 2.6); preparing simple income statements (trading and profit and loss accounts) (Unit 2.7); balancing and closing accounts (Unit 2.8).

Key term

"T" account: a two-sided form used to record, in a simple way, transactions affecting a particular aspect of a business's financial activities.

The accounts would look like this:

Equipment	

Bank	

Capital	

Accounts payable	

Step 2: Record the starting figure for each item in the appropriate "T" account.

In each form, one column is used to record increases in the item and one for decreases. The starting value is always entered on the "increase" side. It is important to note that accounts work in the following way.

Asset	
Increase (+) Starting value	Decrease (–)

Liability	
Decrease (–)	Increase (+) Starting value

Capital	
Decrease (–)	Increase (+) Starting value

Assets originate from the left-hand side of the statement of financial position (balance sheet), and so have their starting amounts recorded on the left-hand side of their accounts. Similarly, liabilities and capital originate from the right-hand side of the statement of financial position (balance sheet) and so have their starting amounts recorded on the right-hand side of their accounts.

Illustration 14

Recording the opening amounts in "T" accounts

Here are Dale's accounts with the opening figures recorded correctly.

Equipment	
$ 37 000	$

Bank	
$	$
8 000	

Capital	
$	$
	40 000

Accounts payable	
$	$
	5 000

Step 3: Record transactions in the "T" accounts.

Each transaction is recorded using the "T" accounts. You already know that, whatever the transaction, two accounts will be affected, so it will be necessary to make two entries.

Illustration 15

Recording the purchase of some additional equipment

Dale bought some additional equipment for $6 000 and paid by cheque.

First, work out which accounts will be affected by the transaction. In this case it is:

- equipment
- bank.

Then decide how each of these accounts will be affected:

- equipment + $6 000
- bank − $6 000

Now record these changes in the accounts:

Equipment	
$	$
37 000	
6 000	

Bank	
$	$
8 000	**6 000**

Capital	
$	$
	40 000

Accounts payable	
$	$
	5 000

You will see that:

- in the *equipment account* an entry has been made on the *left-hand*, positive, side of the account because there has been an increase in equipment
- in the *bank account* an entry has been made on the *right-hand*, negative, side of the account because there has been a decrease in bank.

Step 4: Continue to record transactions.

Transactions are recorded using a similar process, making a series of decisions:

- Which two accounts are affected by the transaction?
- How is each account affected by the transaction (increase or decrease)?
- On which side of each account should an entry be made?

Illustration 16

Recording a payment to accounts payable

Dale pays an account payable $1 000 by cheque.

This transaction affects a liability. The sequence of decisions is shown in the table.

Question	Answer
Which two accounts are affected by the transaction?	Bank Accounts payable
How is each account affected by the transaction (increase or decrease)?	Bank: decrease Accounts payable: decrease
On which side of each account should an entry be made?	Bank: right-hand (decrease) side Account payable: left-hand (decrease) side

Here are the updated accounts.

Equipment	
$	$
37 000	
6 000	

Bank	
$	$
8 000	6 000
	1 000

Capital	
$	$
	40 000

Accounts payable	
$	$
1 000	5 000

Illustration 17

Recording drawings

Dale has decided to withdraw a cheque for $200 for his private use (drawings). In this case, the transaction affects capital.

Decision	Answer
Which two accounts are affected by the transaction?	Bank Capital
How is each account affected by the transaction (increase or decrease)?	Bank: decrease Capital: decrease
On which side of each account should an entry be made?	Bank: right-hand (decrease) side Capital: left-hand (decrease) side

Here are the updated accounts.

Equipment	
$	$
37 000	
6 000	

Bank	
$	$
8 000	6 000
	1 000
	200

Capital	
$	$
200	40 000

Accounts payable	
$	$
1 000	5 000

Notes:

- The illustrations show the very simplest way of recording transactions in "T" accounts.
- As necessary, additional "T" accounts can be added to the list as new transactions, resulting in new assets or liabilities, occur.
- Sometimes the abbreviation "A/c" is used in the title of accounts. A/c is a recognised abbreviation of the word "account".

Practice questions

25. Recording transactions using simple "T" accounts

Caroline owns a business that provides a delivery service. On 1 January 2018 the business's statement of financial position (balance sheet) was as follows.

Caroline
Statement of financial position (balance sheet) at 1 January 2018

	$		$
ASSETS		CAPITAL	47 000
Vehicles	40 000		
Bank	19 000	LIABILITY	
		Bank loan	12 000
	59 000		59 000

The following transactions occurred during the following few days:

Jan 2 Purchased an additional vehicle for $14 000 and paid by cheque

3 Borrowed an additional $4 000 from the bank. The funds were paid directly into the business's bank account

4 Caroline withdrew a cheque for $2 000 for private use

Record these details in simple "T" accounts. Record amounts only.

26. Recording transactions in simple "T" accounts

John owns a café. His business's statement of financial position (balance sheet) on 1 June 2018 was as follows.

John
Statement of financial position (balance sheet) at 1 June 2018

	$		$
ASSETS		CAPITAL	29 000
Equipment	27 000		
Bank	8 000	LIABILITY	
		Accounts payable	6 000
	35 000		35 000

The following transactions occurred during the following few days:

June 2 Purchased some additional equipment for $4 000 and paid by cheque

3 Paid an account payable $2 000 by cheque

4 John withdrew a cheque for $700 for private use

Record these details in simple "T" accounts. Record amounts only.

27. Deciding how accounts are affected by transactions

Complete the table shown below for each of the transactions.

Transaction	First account affected		Second account affected	
	Account	Increase/ decrease	Account	Increase/ decrease
Owner started business by investing money in a business's bank account				
Purchased a vehicle and paid by cheque				
Purchased some equipment on credit				
Owner withdrew a cheque for private use				
Paid an account payable by cheque				

28. Deciding how accounts are affected by transactions

Complete the table shown below for each of the transactions.

Transaction	First account affected		Second account affected	
	Account	Increase/ decrease	Account	Increase/ decrease
Some furniture was purchased by cheque				
A bank loan was arranged. The funds were paid into the business's bank account				
Purchased a vehicle on credit				
Sold some unwanted furniture on credit				
Repaid part of the bank loan by a withdrawal of funds from the business's bank account				

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Debit and credit

You may have noticed that in the illustrations on the previous pages, there was always a left-hand entry and a right-hand entry in the "T" accounts. You will find that whatever transaction you record in an accounting system, it always results in a left-hand entry and a right-hand entry. This is a very useful outcome. It means that even if you are trying to work out how to record an unfamiliar or difficult transaction, you will know that you must have a left-hand entry and a right-hand entry.

Key terms

Debit: the left-hand side of an account.

Credit: the right-hand side of an account.

It is usual practice to use the term **debit** for entries on the left-hand side of any account, and **credit** for entries on the right-hand side.

How do accounts work?

Here is a summary of how accounts work:

Any account	
Debit (left-hand) side	**Credit** (right-hand) side

Asset	
Increase (+) **Debit** (left-hand) side	Decrease (–) **Credit** (right-hand) side

Liability	
Decrease (–) **Debit** (left-hand) side	Increase (+) **Credit** (right-hand) side

Capital	
Decrease (–) **Debit** (left-hand) side	Increase (+) **Credit** (right-hand) side

Or:

Debit entries	Credit entries
Debit: an increase in an **asset**	Credit: a decrease in an **asset**
Debit: a decrease in a **liability**	Credit: an increase in a **liability**
Debit: a decrease in **capital**	Credit: an increase in **capital**

Practice questions

29. Using the terms debit and credit

Will owns a business selling fruit and vegetables. On 1 July 2018, the business's statement of financial position (balance sheet) was as follows.

Will Statement of financial position (balance sheet) at 1 July 2018			
	$		$
ASSETS		CAPITAL	17 000
Vehicle	14 000		
Bank	7 000	LIABILITY	
		Accounts payable	4 000
	21 000		21 000

The following transactions occurred during the following few days:

July 2 Purchased some equipment for $9 000 on credit
3 Will withdrew a cheque for $300 for private use
4 Arranged a bank loan for $6 000. The funds were paid directly into the business's bank account
5 Purchased some additional equipment for $9 200 and paid by cheque
6 Paid an account payable $2 500

Record these details in simple "T" accounts. Record amounts only. Open additional accounts as necessary.

30. Using the terms debit and credit

Kelvin owns a plumbing business. On 1 May 2018 the business's statement of financial position (balance sheet) was as follows.

Kelvin Statement of financial position (balance sheet) at 1 May 2018			
	$		$
ASSETS		CAPITAL	24 200
Vehicle	13 000		
Equipment	8 000		
Bank	4 000	LIABILITY	
Cash	400	Accounts payable	1 200
	25 400		25 400

The following transactions occurred during the following few days:

May 2 Kelvin withdrew cash $200 for private use
3 An account payable was paid $1 000 by cheque
4 Sold some unwanted equipment, value $800, on credit for that amount
5 Purchased some new equipment on credit for $5 000
6 Received $100 cash from an account receivable

Record these details in simple "T" accounts. Record amounts only. Open additional accounts as necessary.

31. Using the terms debit and credit

Here is a list of transactions. In each case, decide which two accounts are affected by the transaction and whether each account will increase or decrease in value. State whether you would debit or credit each of the accounts concerned. The first transaction has been completed as an example.

Transaction	Accounts affected	Increase/ decrease	Debit/ credit
Purchased some furniture by cheque	Furniture	Increase	Debit
	Bank	Decrease	Credit
Paid an account payable by cheque			
Owner withdrew cash for private use			
Purchased a vehicle on credit			

32. Using the terms debit and credit

Here is a list of transactions. In each case, decide which two accounts are affected by the transaction and whether each account will increase or decrease in value. State whether you would debit or credit each of the accounts concerned. The first transaction has been completed as an example.

Transaction	Accounts affected	Increase/ decrease	Debit/ credit
Owner withdrew a cheque for private use	Capital	Decrease	Debit
	Bank	Decrease	Credit
Purchased equipment on credit			
Paid an account payable in cash			
Sold some unwanted furniture on credit			
Received cash from an account receivable			

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

The two methods used to work out the rules for double entry

There are two main methods for deciding how to make entries for any transaction.

Method 1: Classifying accounts as assets, liabilities or part of capital

In this method, accounts are identified as being an asset, a liability or part of the capital of the business. Once this identification has taken place, entries in the account follow the rules set out above: that is, assets increase on the debit side, but liabilities and capital accounts increase on the credit side (see the summaries above).

Method 2: The Receiving value/In and Giving value/Out approach to making entries

Some people find it helpful to think about the rules for recording transactions as follows:

- account receiving value: debit
- account giving value: credit

Or, putting it even more briefly:

- value in: debit
- value out: credit

Here are examples which illustrate how this idea works.

	Debit Receiving value In		Credit Giving value Out	
	Account	Explanation	Account	Explanation
Purchase of a vehicle by cheque	Vehicle	Receives value as new asset is purchased	Bank	Gives value as money goes out of the account
Purchase of equipment on credit	Equipment	Receives value as new asset is purchased	Accounts payable	Gives value when the equipment is supplied
Payment of an account payable by cheque	Accounts payable	Supplier receives value as payment is made	Bank	Gives value as money is paid to supplier
Sale of equipment on credit	Accounts receivable	Accounts receivable receives the value of the equipment	Equipment	Gives value when equipment is sold
Owner invests private funds in business's bank account	Bank	Receives value as money is provided by the owner	Capital	Owner gives value when money is transferred from private funds and given to the business
Owner withdraws cash for private use	Capital	Owner receives value	Cash	Gives value when the owner takes money from the business

You do not need to know about both these methods (unless you think this might help you)! To avoid confusion, it is suggested that you ask your teacher which method is preferred for your class and use that one. You may feel more reassured once you have had some practice with one of these methods, you will soon develop confidence in working out the correct double entry for any transaction. In the meantime, reference will be made to both these methods as you learn about some new accounts and how they work.

Practice questions

These questions use Method 2.

33. Trying out the Receiving value/In and Giving value/Out approach

Here are some transactions. Complete the table.

In each case decide which account should be debited and which account credited, by thinking about which account will receive value (value in) and which account will lose value (value out). Explain each decision you make. The first transaction has been completed as an example.

	Debit Receiving value In		Credit Giving value Out	
	Account	Explanation	Account	Explanation
Purchased furniture and paid in cash	Furniture	Receives value as new asset is purchased	Cash	Gives value as money goes out of the account
Purchased machinery and paid by cheque				
Purchased equipment on credit				
Paid an account payable by cheque				
Owner invested an additional amount in the business's bank account				
Owner withdrew a cheque for private use				

34. Trying out the Receiving value/In and Giving value/Out approach

Here are some transactions. Complete the table.

In each case, decide which account should be debited and which account credited, by thinking about which account will receive value (value In) and which account will lose value (value Out). Explain each decision you make.

	Debit Receiving value In		Credit Giving value Out	
	Account	Explanation	Account	Explanation
Purchased a vehicle and paid by cheque				
Paid an account payable by cheque				
Sold some unwanted furniture on credit				
Received cash from an account receivable				
Owner increased investment in the business by transferring private funds into the business's bank account				
Owner withdrew cash for private use				
Transferred cash to the business's bank account				

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Ledger accounts

When recording transactions in accounts it is important not just to record the amounts, but also the date of the transaction and a short statement (sometimes called the "narrative") about the transaction.

In order to do this, simple "T" accounts become a little more sophisticated.

Illustration 18

Using ledger accounts

Here is a new version of the "T" accounts as shown in Illustration 17. This time they are set out as proper ledger accounts. This means the accounts now show:

- a *date* for each entry (using the columns for month and day)
- a *narrative* about each entry, written in the details column:
  - For the opening entry the word "Balance" is used.
  - The rule for other entries is *to name the other account.*

You will also notice that each account now shows the abbreviation Dr (for debit) on the left-hand side of each account; and the abbreviation Cr (for credit) on the right-hand side.

Dr			Equipment				Cr
			$				$
May	1	Balance	37 000				
	2	Bank	6 000				

Dr			Bank				Cr
			$				$
May	1	Balance	8 000	May	2	Equipment	6 000
					3	Payable	1 000
					4	Capital	200

Dr			Capital				Cr
			$				$
May	4	Bank	200	May	1	Balance	40 000

Dr			Accounts payable				Cr
			$				$
May	3	Bank	1 000	May	1	Balance	5 000

Note:

- Once the name of the month is recorded on the debit and/or credit side of an account, there is no need to repeat this detail on succeeding lines.

What about statements of financial position (balance sheets)?

It is possible to prepare a statement of financial position (balance sheet) at any time based on all the detailed information recorded in ledger accounts.

In Illustration 18, for example, it is relatively easy to work out an updated figure for each of the four ledger accounts:

Equipment	$43 000	(i.e. $37 000 + $6 000)
Bank	$800	(i.e. $8 000 – $7 200)
Capital	$39 800	(i.e. $40 000 – $200)
Accounts payable	$4 000	(i.e. $5 000 – $1 000)

So the (simple) statement of financial position (balance sheet) on 4 May, after the transactions had been recorded would look like this:

Statement of financial position (balance sheet) at 4 May 2018			
	$		$
ASSETS		CAPITAL	39 800
Equipment	43 000		
Bank	800	LIABILITY	
		Accounts payable	4 000
	43 800		43 800

Statements of financial position (balance sheets) remain a very important financial statement. They are prepared by businesses whenever required, and at least at the end of every financial or trading period.

Practice questions

35. Preparing detailed ledger accounts

Ross owns a music business. His business's statement of financial position (balance sheet) at 1 January 2018 was as follows.

Ross Statement of financial position (balance sheet) at 1 January 2018			
	$		$
ASSETS		CAPITAL	100 000
Premises	90 000		
Equipment	12 000	LIABILITY	
Vehicle	9 000	Bank loan	15 000
Bank	3 300		
Cash	700		
	115 000		115 000

The following transactions occurred during the following few days.

Jan 2 Repaid $1 000 of the bank loan, transferring funds from the business's bank account

3 Purchased some additional equipment on credit for $4 100

4 Ross withdrew $300 cash for private use

5 Sold some unwanted equipment, value $500, on credit for that amount

6 Ross introduced some additional capital by paying a cheque for $4 000 from his private funds

7 Transferred $200 cash to the bank account

Tip

It is easy to overlook some point of detail when you are preparing a set of accounts. When you think you have completed a task, check through to see if you have missed out a date or narrative.

a. Prepare detailed ledger accounts to record this information. Record dates, narratives and amounts. Open additional accounts as necessary. Include the abbreviations "Dr" and "Cr" in the account titles.

b. Prepare a new (classified) statement of financial position (balance sheet) dated 7 January 2018, when all the transactions have been recorded. Assume that the bank loan is a non-current liability.

36. Preparing detailed ledger accounts

Becky owns an interior design business. Her business's statement of financial position (balance sheet) at 1 April 2018 was as follows.

Becky
Statement of financial position (balance sheet) at 1 April 2018

	$		$
ASSETS		CAPITAL	32 900
Vehicle	16 000		
Furniture	11 000	LIABILITY	
Accounts receivable	4 400	Accounts payable	2 200
Bank	2 800		
Cash	900		
	35 100		35 100

The following transactions occurred during the following few days:

April 2 Purchased some additional furniture for $2 400 and paid by cheque

3 Becky withdrew a cheque for $200 for her private use

4 Received a cheque from an account receivable for $2 900

5 Arranged a long-term loan with the bank for $7 200. The funds were paid into the business's bank account

6 Paid an account payable $400 in cash

7 Transferred $100 cash to the bank account

a. Prepare detailed ledger accounts to record this information. Record dates, narratives and amounts. Open additional accounts as necessary. Include the abbreviations "Dr" and "Cr" in the account titles.

b. Prepare a new statement of financial position (balance sheet) dated 7 April 2018, when all the transactions have been recorded.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

2.5 Using expenses, purchases, sales and drawings accounts

Objectives

By the end of this unit you will be able to:

- record some new transactions involving expenses
- record the purchase and sale of goods in ledger accounts
- make entries for drawings in ledger accounts.

In this unit you are going to develop your skills in recording transactions. So far you have concentrated on recording transactions affecting just assets, liabilities and capital. You have learned that whatever the transaction, there are always two entries to be made in the accounting records: one of these is a debit entry and the other a credit entry. You are now going to apply the rules of double entry to a further important group of transactions: the payment of **expenses**, the purchase of goods for resale and the sale of goods.

Key term

Expenses: payments made to purchase goods or services to run the business that are of short-term benefit to the business.

What are expenses?

Expenses are the everyday running costs of a business, such as electricity, wages, rent, telephone charges, etc. All businesses make regular payments for items like these. The important feature of an expense is that the benefit received from the payment is very short lived. After just a few days or weeks, the business will be making another payment for the same thing. Compare this with, say, a business buying some equipment (an asset). In this situation, the benefit to the business lasts for a long time – normally quite a few years. On the other hand, if a business pays rent (an expense) the benefit lasts just a few weeks, and then the next rent payment has to be made. This distinction is important in accounting and the terms "revenue expenditure" (for expenses) and "capital expenditure" (for non-current assets) are often used.

Link

There is more about these terms in Unit 6.5.

Here are some typical expenses for a small business:

- administration expenses
- advertising
- carriage (delivery charges)
- electricity
- general expenses
- insurance
- interest charges
- maintenance costs
- motor expenses
- operating expenses
- repairs
- salaries
- telephone charges
- wages
- water rates

How are expenses recorded?

When payment is made for an expense a record must be kept in the accounting system. As you already know, any payment by cheque or in cash is bound to result in the following:

Asset bank decreases so credit bank account
Asset cash decreases so credit cash account

You can probably work out from the rules of double entry that the other entry for the transaction must be:

Debit the expense account

So expense accounts are debited when payments are made. This is not very different from debiting asset accounts when assets are purchased.

Illustration 19

Recording expenses

On 31 May the owner of a business paid wages of $210 in cash.

The two accounts involved are cash and wages.

Dr			Cash				Cr
			$				$
				May	31	Wages	210

Dr			Wages				Cr
			$				$
May	31	Cash	210				

Buying goods for resale

The main activity of many businesses is buying goods from suppliers in order to sell them to customers at a profit.

When goods for resale are purchased by cheque the entries required will be:

- debit the purchases account
- credit the bank account.

If the goods for resale were purchased on credit the entries would be:

- debit the purchases account
- credit the account of the credit supplier (accounts payable).

The purchases account is rather like an expense account, because the money spent on goods for resale is of very temporary benefit to the business, as the goods are (hopefully) soon sold to customers.

Tip

The purchases account is only used when goods for resale are purchased. This account is not used for the purchase of an asset. As you know, when an asset (for example, a new vehicle) is purchased, the asset account is debited.

Illustration 20

Recording the purchase of goods for resale

On 4 May a business purchased some goods for resale, value $420, and paid by cheque. On 5 May the business purchased some goods on credit, value $1 700.

The accounts would show the following entries:

Dr			Purchases			Cr
			$			$
May	4	Bank	420			
	5	Accounts payable	1 700			

Dr			Bank			Cr
			$			$
				May	4 Purchases	420

Dr			Accounts Payable			Cr
			$			$
				May	5 Purchases	1 700

Link

See Chapter 6 for information about calculating and recording profits and losses.

Selling goods

Every time goods are sold, the owner of the business will be pleased, not only because the business will receive money (or the promise of money), but also because the business will have the chance of making a profit on the sale.

If goods are sold for cash, the entries required will be:

- debit the cash account
- credit the sales account.

Of course, the money from the customer might be banked immediately, in which case the debit entry would be in the bank account.

If goods are sold on credit, the entries required will be:

- debit the account of the credit customer (account receivable)
- credit the sales account.

Note:

- the sales account is only used to record the sale of goods. It is not used to record the sale of a non-current asset.

Illustration 21

Recording the sale of goods

On 8 May a business sold goods for $920 and received payment by cheque. On 9 May the business sold some goods on credit for $380.

The accounts would show the following entries:

Dr	Sales			Cr
				$
	May	8	Bank	920
		9	Accounts receivable	380

Dr	Bank				Cr
			$		$
May	8	Sales	920		

Dr	Accounts receivable				Cr
			$		$
May	9	Sales	380		

What about inventories?

Of course, throughout a period of trading the owner of a business will be holding inventories (stocks of goods for resale). The way in which this information is recorded in the accounting records is covered in Unit 5.1.

Practice questions

37. Recording expenses, purchases and sales

Travis opened a business selling electrical goods on 1 February 2018. The business's first statement of financial position (balance sheet) on that date was as follows.

Travis Statement of financial position (balance sheet) at 1 February 2018			
	$		$
ASSETS		CAPITAL	12 400
Bank	12 000		
Cash	400		
	12 400		12 400

The following transactions occurred during February 2018:

Feb 2 Purchased goods for resale and paid by a cheque for $1 200
4 Paid two weeks' rent by cheque for $420
5 Cash sales totalled $330
8 Paid insurance by cheque for $180
11 Purchased goods for resale on credit, value $840
14 Sales on credit totalled $910
18 Paid two weeks' rent by cheque for $420
19 Paid insurance, $40, in cash
21 Received cheques totalling $520 for the sale of goods – cheques paid into the bank

24 Purchased goods for resale and paid $60 in cash

Record this information in suitable ledger accounts.

38. Recording expenses, purchases and sales

Jenny opened a business selling shoes on 1 June 2018. The business's first statement of financial position (balance sheet) on that date was as follows.

Jenny
Statement of financial position (balance sheet) at 1 June 2018

	$		$
ASSETS		CAPITAL	15 100
Bank	14 400		
Cash	700		
	15 100		15 100

The following transactions occurred during June 2018:

June 2 Purchased goods for resale and paid by cheque for $4 700
3 Paid one month's rent by cheque for $740
6 Cash sales totalled $490
7 Paid wages of $580 in cash
11 Purchased goods for resale on credit, value $1 470
13 Sales on credit totalled $1 420
14 Paid wages of $490 in cash
19 Paid electricity charges by cheque for $210
21 Received cheques totalling $810 for the sale of goods – cheques paid into the bank
24 Purchased goods for resale and paid $110 in cash

Record this information in suitable ledger accounts.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

The drawings account

You already know that the owner of a business is likely to take money from the business for private use, and that this transaction is referred to as drawings. So far, any drawings have been debited immediately to the capital account. It is usually considered a better idea, however, to keep a separate record of drawings throughout a financial period.

So the entries for recording drawings now become:

- debit the drawings account
- credit the bank or cash account.

It is important to remember that drawings are a reduction in the investment of the owner in the business. Drawings are not an expense of the business. Drawings result from personal decisions made by the owner of the business, but expenses occur because of the trading activities of the business.

Illustration 22

Recording drawings

The owner of a business has invested capital of $80 000. The owner withdrew a cheque for $200 for private use on 1 August and $80 cash for private use on 3 August.

The accounting records will be as follows.

Dr			Capital				Cr
			$				$
				Aug	1	Balance	80 000

Dr			Bank				Cr
			$				$
				Aug	1	Drawings	200

Dr			Cash				Cr
			$				$
				Aug	3	Drawings	80

Dr			Drawings				Cr
			$				$
Aug	1	Bank	200				
	3	Cash	80				

Practice questions

39. Expense, purchases, sales and drawings accounts

Alex owns a business selling footwear. The business's opening statement of financial position (balance sheet) on 1 April 2018 was as follows.

Alex Statement of financial position (balance sheet) at 1 April 2018			
	$		$
ASSETS		CAPITAL	14 900
Equipment	6 200		
Bank	8 400		
Cash	300		
	14 900		14 900

The following transactions occurred during April:

April 4 Purchased goods for resale on credit, value $3 600
5 Cash sales totalled $1 230
8 Alex withdrew a cheque for $240 for private use
9 Sold goods on credit, value $470

11 Purchased goods for resale and paid by cheque for $510
13 Paid wages of $620 in cash
18 Purchased some additional equipment and paid by cheque for $1 020
19 Alex withdrew $90 cash for private use
21 Sales of $720 were paid into the bank
27 Paid wages of $580 in cash

Record this information in suitable ledger accounts, including a separate account for drawings.

40. Expense, purchases, sales and drawings accounts

Fanella owns a grocery store. The business's opening statement of financial position (balance sheet) on 1 October 2017 was as follows.

Fanella
Statement of financial position (balance sheet) at 1 October 2017

	$		$
ASSETS		CAPITAL	17 100
Fittings	8 600		
Bank	7 800		
Cash	700		
	17 100		17 100

The following transactions occurred during October:

Oct 4 Purchased goods for resale and paid $500 in cash
6 Purchased goods for resale on credit, value $4 240
7 Cash sales totalled $990
11 Paid rent for the month by cheque for $770
12 Fanella withdrew $110 cash for private use
15 Sales on credit totalled $440
18 Sold some unwanted fittings with a value of $300 and received cash for this amount
22 Paid an account payable $3 000 by cheque
25 Received cash $210 from the receivable
29 Fanella withdrew a cheque for $390 for private use

Record this information in suitable ledger accounts, including a separate account for drawings.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Using these new accounts and the rules of double entry

You will remember from the previous unit that you have the choice of two methods of thinking about how accounts work. You may wish to refer to Unit 2.4 to refresh your memory about these methods.

In the case of these new accounts:

Method 1: using the "classification" method

Identify expense, purchase, sales and drawings accounts as part of the information about the capital of the business. These new accounts work in the same way as a capital account. A debit entry in an expense/purchases/drawings account indicates a decrease in capital, that is, the value of the business has decreased. A credit entry in a sales account indicates an increase in capital, that is, the value of the business has increased.

Method 2: using the "Receiving value/Giving value" method

For a purchase, debit the expense/purchases/drawings account (which gains value) and credit the bank/cash account (which loses value). For a sale, debit the bank/cash account (which receives value) and credit the sales account (which gives value).

Summary: the rules for double entry

Debit	Credit
Asset accounts when they increase in value	Asset accounts when they decrease in value
Liability accounts when they decrease in value	Liability accounts when they increase in value
Capital when it decreases in value	Capital when it increases in value
Expense accounts when payments are made	Sales account when goods are sold
Purchase accounts when goods are purchased	
Drawings account when payments are made to the owner	

Practice questions

41. Checking the double entry for a variety of transactions

The following table shows a range of transactions. Complete the table, identifying which account should be debited and which account should be credited for each transaction. As an example, the first row has been completed for you.

Transaction	Account to be debited	Account to be credited
Paid wages in cash	Wages	Cash
Purchased goods for resale on credit		
Owner withdrew cheque for private use		
Paid an account payable in cash		
Sold goods on credit		
Sold goods for cash		
Purchased furniture by cheque		
Owner made additional investment of money in the business		
Paid rent by cheque		
Received cheque from an account receivable		

42. Checking the double entry for a variety of transactions

The following table shows a range of transactions. Complete the table, identifying which account should be debited and which account should be credited for each transaction. The first row is given as an example.

Transaction	Account to be debited	Account to be credited
Paid salaries by cheque	Salaries	Bank
Arranged a bank loan. The funds were paid into the business's bank account		
Sold goods and paid the proceeds into the bank		
Purchased goods for resale for cash		
Owner withdrew cash for private use		
Paid an account payable by cheque		
Sold goods on credit		
Received cash from an account receivable		

43. Identifying transactions

The following accounts show a record of transactions over a period of five days. There is one transaction per day.

Dr			Purchases				Cr
			$				$
Jan	1	Bank	6 000				
	5	Accounts payable	2 290				

Dr			Sales				Cr
			$				$
				Jan	2	Cash	3 200
					4	Accounts receivable	1 730

Dr			General expenses				Cr
			$				$
Jan	3	Bank	320				

Dr			Bank				Cr
			$				$
				Jan	1	Purchases	6 000
				Jan	3	General expenses	320

Dr			Cash				Cr
			$				$
Jan	2	Sales	3 200				

Dr		Accounts receivable		Cr			
			$				$
Jan	4	Sales	1 730				

Dr		Accounts payable		Cr			
			$				$
				Jan	5	Purchases	2 290

Identify the transactions that occurred on 1, 2, 3, 4 and 5 January.

44. Identifying transactions

The following accounts show a record of transactions over a period of five days. There is one transaction per day.

Dr		Bank		Cr			
			$				$
May	5	Accounts receivable	2 000				

Dr		Cash		Cr			
			$				$
				May	2	Wages	280
					3	Purchases	170

Dr		Accounts receivable		Cr			
			$				$
May	1	Sales	3 790	May	5	Bank	2 000

Dr		Accounts payable		Cr			
			$				$
				May	4	Purchases	1 200

Dr		Wages		Cr			
			$				$
May	2	Cash	280				

Dr		Sales		Cr			
			$	May	1	Accounts receivable	$ 3 790

Dr		Purchases		Cr			
			$				$
May	3	Cash	170				
	4	Accounts payable	1 200				

Identify the transactions that occurred on 1, 2, 3, 4 and 5 May.

45. Recording a variety of transactions

Bradley owns a small retail store. His business's statement of financial position (balance sheet) on 1 March 2018 was as follows.

Bradley
Statement of financial position (balance sheet) at 1 March 2018

	$		$
ASSETS		CAPITAL	116 000
Premises	120 000		
Vehicle	11 500	LIABILITIES	
Equipment	8 900	Bank loan	30 000
Accounts receivable	7 300	Accounts payable	8 900
Bank	6 400		
Cash	800		
	154 900		154 900

The following transactions occurred during March:

March 3 Paid an account payable $1 700 by cheque
4 Cash sales totalled $1 470
5 Paid $800 cash into the bank account
8 Purchased goods for resale on credit, value $3 200
10 Paid insurance by cheque for $420
12 Paid wages of shop assistants of $580 in cash
15 Received cheque from an account receivable for $2 800
17 Sold some unwanted equipment, value $400, and received a cheque for that amount
18 Paid loan interest of $120. This amount was transferred from the business's bank account
19 Bradley withdrew cash $250 for private use
22 Cash sales totalled $1 280
24 Purchased some new equipment and paid by cheque for $2 800
26 Paid wages of shop assistants of $630 in cash
29 Paid insurance $180 in cash
30 Paid vehicle expenses by cheque for $230

Record this information in suitable ledger accounts.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

2.6 The trial balance

Objectives

By the end of this unit you will be able to:

- prepare a trial balance to check the accuracy of the double-entry records
- explain that a trial balance does have some limitations.

Key term

Trial balance: a summary of all the balances on all the accounts in a business's books of account that provides a check on the accuracy of the double-entry records.

Now that you are used to recording a variety of transactions in ledger accounts, it is time to think about how you can make a quick check to ensure that you have not made a mistake and broken any of the rules of double entry. This quick check is called a **trial balance**.

As you know, double entry means that for any transaction there has to be a debit entry and a matching credit entry. The trial balance is based on this idea and, in effect, it checks whether the total of debit entries in a set of accounts equals the total of credit entries.

Illustration 23

The idea behind a trial balance

Here is a very simple set of accounts using the rules of double entry.

Dr		Bank		Cr			
			$				$
Jan	1	Balance	13 000	Jan	4	Accounts payable	2 000
	10	Sales	4 000				

Dr		Capital		Cr			
			$				$
				Jan	1	Balance	11 000

Dr		Accounts payable		Cr			
			$				$
Jan	4	Bank	2 000	Jan	1	Balance	2 000
					7	Purchases	3 000

Dr		Purchases		Cr			
			$				$
Jan	7	Accounts payable	3 000				

Dr		Capital		Cr			
			$				$
				Jan	10	Bank	4 000

There are very few entries, so it is easy to see that total debit entries equal total credit entries ($22 000). Therefore, it appears that the rules of double entry have been followed. You can check the detail here.

Account	Total of debit entries $	Total of credit entries $
Bank	17 000	2 000
Capital	–	11 000
Accounts payable	2 000	5 000
Purchases	3 000	–
Sales	–	4 000
	22 000	22 000

A trial balance would also provide a similar quick check on double entry but also provide some useful information for those using the accounts.

Instead of showing total debit entries and total credit entries for each account, a trial balance shows the net amount in each account (as you know, the net amount is called the balance). As well as providing a check on whether the double-entry procedures have been followed correctly, a trial balance is also used to provide a quick update of the balance on each account in the system.

Trial balance at 10 January 2018		
	Dr $	Cr $
Bank	15 000	
Capital		11 000
Accounts payable		3 000
Purchases	3 000	
Sales		4 000
	18 000	18 000

What is the correct procedure for preparing a trial balance?

A trial balance can be prepared at any time, but is usually prepared at regular intervals, perhaps monthly. It would definitely be produced at the end of a business's accounting year.

Step 1

List all the accounts in the accounting system.

Step 2

Calculate the net value of each account. Do this by adding up the total of debit entries and the total of credit entries in the account and then find the difference between the two. Here is an example.

Dr			Any account				Cr
			$				$
May	4	Entry	3 000	May	6	Entry	2 000
	7	Entry	6 000		18	Entry	4 000
	26	Entry	1 000				

In this account:

- total debit entries are $10 000
- total credit entries are $6 000
- the difference between the two sides is $4 000.

You may find it difficult to keep all these figures in your head as you work out the difference between the two sides. To help, you may find it useful to write in what are called **pencil footings**. To do this, write the total of the debit side and the credit side in pencil, in very small figures and as neatly as you can. You can leave these pencil figures where they are until you come to complete the account by going through the balancing process, which is covered in Chapter 4.

Here is the account again, showing pencil footings.

Dr			Any account				Cr
			$				$
May	4	Entry	3 000	May	6	Entry	2 000
	7	Entry	6 000		18	Entry	4 000
	26	Entry	1 000				6000
			4000				10000

Key term

Pencil footings: handwritten totals of the debit side and credit side of an account, written neatly in pencil, legible but very small in size. The totals are used to help in the preparation of a trial balance. The pencil footings are erased at a later stage when the trial balance has been prepared.

Step 3

Record the net amount (the balance) in the trial balance. The amount should be recorded on the debit side in the trial balance if the debit total exceeded the credit total. Similarly, the amount should be recorded on the credit side of the trial balance if the credit total exceeded the debit total.

In the example, therefore, the net amount of $4 000 should be recorded in the debit column in the trial balance, as shown below.

Trial Balance at 31 May 2018		
	Dr	Cr
	$	$
Any account	4000	

Step 4

Continue to calculate the balance (net amount) on each account and record the figure as either a debit or a credit in the trial balance. When all the account details are entered, total the trial balance. If the totals agree, it is assumed that the double entry has been completed correctly.

What would happen if there were errors in the double-entry records?

The totals of a trial balance will only agree if a double entry has been recorded for each transaction.

Here is an illustration of what would happen if there was a mistake in recording transactions.

Illustration 24

Finding errors in the double-entry records

All the transactions are correctly recorded except the receipt from the accounts receivable on 18 February. This transaction has two credit entries, one in the bank account and the other in accounts receivable.

Dr			Bank				Cr
			$				$
Feb	1	Balance	12 000	Feb	8	Purchases	6 400
					18	Accounts receivable	5 000

Dr			Accounts receivable				Cr
			$				$
Feb	1	Balance	6 000	Feb	18	Bank	5 000
	12	Sales	3 200				

Dr			Capital				Cr
			$				$
				Feb	1	Balance	18 000

Dr			Purchases				Cr
			$				$
Feb	8	Bank	6 400				

Dr			Sales				Cr
			$				$
				Feb	12	Accounts receivable	3 200

The trial balance based on this set of accounts is as follows.

Trial balance at 18 February 2018		
	Dr	Cr
	$	$
Bank	600	
Accounts receivable	4200	
Capital		18000
Purchases	6400	
Sales		3200
	11200	21200

Link

See Chapter 7 for more information about errors in accounts and how to correct them.

The totals do not agree because of the mistake made when recording the transaction on 18 February. When trial balance totals do not agree this should instantly alert you to the fact that a mistake has been made in the double entry for transactions.

Is the trial balance process reliable?

Unfortunately, the trial balance technique does have limitations. It is possible to prepare a trial balance where the totals agree, but with errors in the accounting records. To take a simple example, supposing there was a transaction for the amount of $4500, but in error the amount was mis-read and a debit entry made for $5400 and a matching credit entry for $5400. The trial balance totals would still agree, although there is a $900 error in two accounts.

Summary

This table shows how various types of accounts should appear in a trial balance.

Trial balance	
Debit column	Credit column
Assets	Capital
Expenses	Liabilities
Purchases	Sales
Drawings	

Practice questions

46. Preparing a trial balance from a set of accounts

Here is a completed set of accounts. Prepare a trial balance to check the accuracy of the double entry. Follow this procedure:

- List all the accounts in a trial balance headed "at 31 December 2017".
- Calculate the balance of each account (use pencil footings to help you).
- Enter the balance in the appropriate column in the trial balance.

Dr		Furniture		Cr			
			$				$
Dec	1	Balance	14 500				
	22	Bank	700				

Dr		Accounts receivable		Cr			
			$				$
Dec	1	Balance	3 200	Dec	13	Bank	2 500
	20	Sales	1 900				

Dr		Bank		Cr			
			$				$
Dec	1	Balance	2 400	Dec	5	Purchases	2 300
	13	Accounts receivable	2 500		14	Accounts payable	1 200
					22	Furniture	700

Dr		Cash		Cr			
			$				$
Dec	1	Balance	500	Dec	6	Drawings	300
	8	Sales	1 200		15	Wages	600
					26	Wages	500

Dr		Capital		Cr			
			$				$
				Dec	1	Balance	17 900

Dr		Accounts payable		Cr			
			$				$
Dec	14	Bank	1 200	Dec	1	Balance	2 700
					11	Purchases	1 800

Dr		Purchases		Cr			
			$				$
Dec	5	Bank	2 300				
	11	Accounts payable	1 800				

Dr		Sales		Cr			
			$				$
				Dec	8	Cash	1 200
					20	Accounts receivable	1 900

Dr		Wages		Cr			
			$				$
Dec	15	Cash	600				
	29	Cash	500				

Dr			Drawings				Cr
			$				$
Dec	6	Cash	300				

47. Preparing a trial balance from a set of accounts

Here is a completed set of accounts. Prepare a trial balance to check the accuracy of the double entry. Follow this procedure:

- List all the accounts in a trial balance headed "at 31 January 2018".
- Calculate the balance of each account (use pencil footings to help you).
- Enter the balance in the appropriate column in the trial balance.

Dr			Vehicle				Cr
			$				$
Jan	1	Balance	11 400				
	25	Bank	7 500				

Dr			Accounts receivable				Cr
			$				$
Jan	1	Balance	6200	Jan	3	Bank	2 900

Dr			Bank				Cr
			$				$
Jan	1	Balance	3 700	Jan	8	Bank loan	2 000
	3	Accounts receivable	2 900		11	Drawings	800
					25	Vehicle	7 500
	20	Sales	5 100		31	Cash	300

Dr			Cash				Cr
			$				$
Dec	1	Balance	400	Jan	18	Rent	900
	7	Sales	1 400		30	Payable	700
	31	Bank	300				

Dr			Capital				Cr
			$				$
				Jan	1	Balance	10 200

Dr			Accounts payable				Cr
			$				$
Jan	30	Cash	700	Jan	1	Balance	3 500
					14	Purchases	5 600

Dr			Bank loan				Cr
			$				$
Jan	8	Bank	2 000	Jan	1	Balance	8 000

Dr			Purchases				Cr
			$				$
Jan	14	Accounts payable	5 600				

Dr			Sales				Cr
			$				$
				Jan	7	Cash	1 400
					20	Bank	5 100

Dr			Rent				Cr
			$				$
Jan	18	Cash	900				

Dr			Drawings				Cr
			$				$
Jan	11	Bank	800				

48. Preparing a trial balance from a list of accounts

On 31 December 2017, the owner of a business extracted the following list of balances from the accounting system.

	$
Accounts payable	400
Accounts receivable	900
Advertising	600
Bank loan	7 000
Capital	10 500
Cash at bank	1 200
Drawings	2 300
General expenses	700
Purchases	6 100
Sales	8 800
Vehicle	14 900

Prepare a trial balance dated 31 December 2017.

49. Preparing a trial balance from a list of accounts

On 31 March 2018, the owner of a business extracted the following list of balances from the accounting system.

	$
Accounts payable	2500
Accounts receivable	1400
Capital	13700
Cash at bank	600
Cash in hand	100
Drawings	2200
Electricity	300
Furniture	14900
Loan interest	500
Purchases	7700
Salaries	11200
Sales	22700

Prepare a trial balance dated 31 March 2018.

50. Recording transactions and checking the double entry with a trial balance

Trevor owns a business selling fishing equipment. The business's statement of financial position (balance sheet) on 1 April 2018 was as follows.

Trevor
Statement of financial position (balance sheet) at 1 April 2018

	$		$
ASSETS		CAPITAL	30700
Vehicle	14800		
Equipment	11200	LIABILITIES	
Accounts receivable	4700	Accounts payable	3600
Bank	3100		
Cash	500		
	34300		34300

During April the following transactions occurred:

April
1 Purchased goods for resale on credit, value $1100
4 Cash sales totalled $1000
7 Trevor withdrew $200 cash for private use
9 Paid rent by cheque $700
11 Purchased some additional equipment and paid by cheque $800
12 Paid $600 cash into the bank account
15 Paid wages of $500 in cash
18 Received a cheque from an account receivable for $2700

19 Trevor withdrew a cheque for $600 for private use
20 Paid an account payable $2 000 by cheque
22 Sales on credit totalled $1 600
25 Cash sales totalled $800
28 Paid wages of $900 in cash

Record this information in suitable ledger accounts. Prepare a trial balance dated 30 April 2018.

51. Recording transactions and checking the double entry with a trial balance

Jody owns a health food store. The business's statement of financial position (balance sheet) on 1 May 2018 was as follows.

Jody
Statement of financial position (balance sheet) at 1 May 2018

	$		$
ASSETS		CAPITAL	14 600
Equipment	8 500		
Fittings	7 900	LIABILITIES	
Accounts receivable	900	Bank loan	4 000
Bank	2 200	Accounts payable	1 700
Cash	800		
	20 300		20 300

During May the following transactions occurred:

May 2 Paid wages of $400 in cash
4 Purchased goods for resale and paid by cheque $600
6 Repaid part of the bank loan $700. Funds were transferred from the business's bank account
9 Cash sales totalled $1 300
10 $900 cash transferred to the bank account
12 Paid $300 loan interest. Funds were transferred from the business's bank account
13 An account receivable paid $700 in cash
16 Jody withdrew $500 cash for her private use
19 Paid wages of $600 in cash
20 Some unwanted equipment, value $1 000, sold for this amount. The cheque was paid into the business's bank account
23 New fittings were purchased by cheque $1 300
29 Sales on credit totalled $1 700

Record this information in suitable ledger accounts. Prepare a trial balance dated 31 May 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

2.7 Preparing simple income statements

Objectives

By the end of this unit you will be able to:

- calculate a business's **gross profit** and **net profit**
- make entries in the account that make it possible to record a business's gross profit and net profit for the year
- make entries in the accounts that make it possible to record a loss for the year
- prepare simple income statements (trading account and profit and loss accounts).

Key terms

Gross profit: the difference between the income from sales and the expenditure on goods sold.

Net profit: the difference between a business's income (sales) and expenditure (purchases and expenses).

Profit: the difference between a business's income (sales) and expenditure (purchases and expenses).

Note:

- In Chapter 5 you will find that carrying inventories (stocks of unsold goods) also affects the profit calculation.

A high priority for the owner of any business will be to make a **profit**. Making a profit is a mark of success for any business, for not only can the owner feel justified in withdrawing cash from the business for private use, but he or she can also believe that there is the possibility of building up the business over a period of time. In this unit you will learn how to calculate the profit (or loss) made by a business and the accounting records that are required to record this.

What is profit?

A profit occurs when a business makes a net gain in its value over a period of time due to successful trading.

To take a simple example, suppose a business started with just one asset: a bank balance of $10 000. The value of the business at this point would be $10 000.

If the owner of the business spent $6 000 on some goods for resale and was able to sell all of these goods for $11 000, the business's value would increase by $5 000. The business's bank balance would now be $15 000. The business's capital would keep in step with the value of the business and would now also be $15 000. The increase in capital is called "profit" and the profit is reflected in the increase in the value of the business's resources, that is, its assets.

Of course, business activity is more complicated than in this simple example. No business can operate without payments being made for running costs (expenses).

Profit is therefore the increase in the value of a business caused by trading activity and it is calculated as follows:

Profit = Sales – (Purchases + Expenses)

Calculating profits and losses

Here is an illustration showing how profits (or losses) can be calculated. The process involves two stages:

Step 1: Calculating a *gross profit* – the profit made by buying and selling goods.

Step 2: Calculating a *net profit* – the profit made having taken into account the running costs of the business.

Illustration 25

Calculating profits from a simple list of transactions

Andy owns a market stall. His statement of financial position (balance sheet) on 1 May 2018 was as follows.

Andy
Statement of financial position (balance sheet) at 1 May 2018

	$		$
ASSETS		CAPITAL	15 000
Vehicle	12 000		
Market stall	5 200	LIABILITIES	
Bank	1 800	Bank loan	4 000
	19 000		19 000

During May the following transactions occurred (all transactions affected the business's bank account).

	$
Purchased goods for resale	4 000
Sales of goods	12 000
Vehicle running costs	500
Wages of assistant	100
Loan interest	200

Step 1: Calculate the difference between sales and purchases to give the "gross profit".

	$
Sales	12 000
Less purchases	(4 000)
Gross profit	8 000

Step 2: Calculate the "net profit" by deducting all the expenses from the gross profit.

	$
Gross profit	8 000
Less total expenses	(800)
Net profit	7 200

Tip

You will find that sometimes alternative terms are used for "net profit". For example, in a business's annual financial statements you might see the expression "profit for the year".

Tip

Nowadays the term "gross income" is sometimes used instead of "gross profit". Similarly, the term "net income" is sometimes used instead of "net profit".

Finally, we need to prepare a new statement of financial position (balance sheet) for Andy's business for the end of May. During May, the bank account has changed because of the transactions listed above and the business has made a net profit of $7 200. The other asset and liability accounts in this simple example have not changed during May.

The business's bank account for May will be as follows.

Dr		Bank			Cr
		$			$
May	Balance	1 800	May	Purchases	4 000
	Sales	12 000		Vehicle running costs	500
	9000	13800		Wages	100
				Loan interest	200
					4800

The updated balance on the bank account is $9 000.

Here is the updated statement of financial position (balance sheet).

Andy Statement of financial position (balance sheet) at 31 May 2018			
	$		$
ASSETS		CAPITAL	22 200
Vehicle	12 000		
Market stall	5 200	LIABILITIES	
Bank	9 000	Bank loan	4 000
	26 200		26 200

Looking at the updated statement of financial position (balance sheet) confirms that:

- the value of the business has increased through successful trading: the assets of the business are now worth more (+$7 200)
- the increase in the net value of the business is shown by an increase in the capital of the business (+$7 200).

When a profit is made, because the net value of the business increases, that extra value belongs to the owner of the business.

Practice questions

52. Calculating gross profit and net profit

Sophie owns a retail outlet. Her business's statement of financial position (balance sheet) on 1 February 2018 was as follows.

Sophie
Statement of financial position (balance sheet) at 1 February 2018

	$		$
ASSETS		CAPITAL	26 000
Fittings	19 400		
Equipment	6 200	LIABILITIES	
Bank	2 300	Accounts payable	1 900
	27 900		27 900

During February, the following transactions occurred (all transactions affected the business's bank account):

	$
Purchased goods for resale	7 500
Sales of goods	16 300
Rent	2 500
Wages of assistant	900
Insurance	800

a. Calculate the business's gross profit.
b. Calculate the business's net profit.
c. Prepare the business's bank account for February 2018.
d. Prepare an update of the business's statement of financial position (balance sheet) at 28 February 2018.

53. Calculating gross profit and net profit

Jack owns a business selling electronic gadgets. His business's statement of financial position (balance sheet) on 1 June 2018 was as follows.

Jack
Statement of financial position (balance sheet) at 1 June 2018

	$		$
ASSETS		CAPITAL	88 500
Shop premises	92 000		
Vehicle	18 000	LIABILITIES	
Bank	3 500	Bank loan	25 000
	113 500		113 500

During June, the following transactions occurred (all transactions affected the business's bank account).

	$
Purchased goods for resale	11 800
Sales of goods	22 500
Wages of shop assistants	4 200
Light and heat	500
Administration expenses	900

a. Calculate the business's gross profit.
b. Calculate the business's net profit.
c. Prepare the business's bank account for June 2018.
d. Prepare an update of the business's statement of financial position (balance sheet) at 30 June 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

How do accounting records show a business's profit (or loss)?

In order to show information about a business's profit (or loss) in the accounting records, two additional accounts are required. These two accounts are only prepared at the end of the accounting period; they do not appear in the books of account at other times.

These two accounts are:

- the **trading account**: used to calculate the gross profit
- the **profit and loss account**: used to calculate the net profit.

Nowadays, these two accounts form part of what is called the business's **income statement**.

The process to record a business's profit (or loss) comprises five stages:

Step 1: Preparing the ledger accounts and extracting a trial balance at the end of the month.

Step 2: Preparing the trading account section of the income statement.

Step 3: Preparing the profit and loss account section of the income statement.

Step 4: Completing the double entry for net profit.

Step 5: Preparing the statement of financial position (balance sheet).

Key terms

Trading account: the part of a business's income statement used to find the gross profit (or gross loss).

Profit and loss account: the part of the business's income statement used to find the profit (or loss).

Income statement: an end of period financial statement that includes the trading and profit and loss accounts.

Illustration 26

Preparing accounting records to show net profit (or loss)

Here is the story of Andy's business for May 2018 again. This time, however, the transactions are recorded in the ledger accounts.

Step 1: Prepare the ledger accounts and extract a trial balance at the end of the month.

Dr		Vehicle			Cr
		$			$
May	Balance	12 000			

Dr		Market stall			Cr
		$			$
May	Balance	5 200			

Dr		Bank			Cr
		$			$
May	Balance	1 800	May	Purchases	4 000
	Sales	12 000		Vehicle running exp	500
				Wages	100
				Loan interest	200

Dr		Capital			Cr
		$			$
			May	Balance	15 000

Dr		Bank loan			Cr
		$			$
			May	Balance	4 000

Dr		Sales			Cr
		$			$
			May	Bank	12 000

Dr		Purchases			Cr
		$			$
May	Bank	4 000			

Dr		Vehicle running expenses			Cr
		$			$
May	Bank	500			

Dr		Wages			Cr
		$			$
May	Bank	100			

Dr		Loan interest		Cr
		$		$
May	Bank	200		

The business's trial balance at the end of May will be as follows.

Trial balance at 31 May 2018		
	Dr	Cr
	$	$
Vehicle	12 000	
Market stall	5 200	
Bank	9 000	
Capital		15 000
Bank loan		4 000
Sales		12 000
Purchases	4 000	
Vehicle running expenses	500	
Wages	100	
Loan interest	200	
	31 000	31 000

Step 2: Prepare the trading account.

At the end of the month, a trading account would be prepared to reveal the gross profit.

The trading account would appear as shown. Notice the formal title, which includes a clear reference to the time period covered by the account.

Dr	Trading account for the month ended 31 May 2018	Cr
$		$

In order for this account to show the gross profit, it is necessary to transfer information about sales and purchases into the account.

Illustration 27

Transferring sales and purchases to the trading account

As you know, there always has to be a debit entry and a credit entry when making entries in accounts. To transfer information about sales, the following entries are necessary:

- debit the sales account
- credit the trading account.

The accounts will then show the following.

Dr		Sales		Cr			
			$				$
May	31	Trading	12 000	May		Bank	12 000

Dr	Trading account for the month ended 31 May 2018		Cr		
		$			$
				Sales	12 000

Using the same process, the entries necessary to transfer information about purchases to the trading account are:

- debit the trading account
- credit the purchases account.

The accounts will then show the following.

Dr		Purchases		Cr			
			$				$
May		Bank	4 000	May	31	Trading	4 000

Dr	Trading Account for the month ended 31 May 2018		Cr		
		$			$
	Purchases	4 000		Sales	12 000

How is gross profit recorded?

If you look at the trading account you will see that the difference between the two sides is the gross profit of $8 000. This amount is recorded as a debit entry in the trading account.

Dr	Trading Account for the month ended 31 May 2018		Cr		
		$			$
	Purchases	4 000		Sales	12 000
	Gross profit	8 000			

Preparing a profit and loss account

Step 3: We can now move on to Step 3 of the process: preparing the profit and loss account.

Where is the credit entry for gross profit?

You will know that having made a debit entry for gross profit, there must be a matching credit entry in the accounts. This is made in the business's profit and loss account, which can now be prepared.

Notes:

- There is no need to use the date columns in the trading account as the date for the entries (31 May) already appears in the title of the account.
- It is important to notice that the sales account is now "empty". There is no balance on the account, because the total sales for the month have now been transferred to the trading account.
- The purchases account is now "empty". The purchases account does not have a balance, because total purchases have now been transferred to the trading account.

Dr	Profit and loss account for the month ended 31 May 2018		Cr
	$		$
		Gross profit	8000

As for the trading account, the profit and loss account has a formal title that should clearly state the time period covered by the account. You will notice that the trading account does not have a balance, because the gross profit has now been transferred to the profit and loss account.

The profit and loss account will show the business's profit, but first it is necessary to transfer information about expenses to this account.

Illustration 28

Recording expenses in the profit and loss account

Each expense is transferred to the profit and loss account as follows:

- debit the profit and loss account
- credit the expense account.

Here, for example, is the transfer of the vehicle running expenses to the profit and loss account.

Notes:

- There is no need to use the date columns in the profit and loss account.
- The vehicle running expenses account is now "empty". The balance of the account has now been transferred to the profit and loss account.

Dr	Vehicle running expenses			Cr			
		$					$
May	Bank	500		May	31	Profit and loss	500

Dr	Profit and loss account for the month ended 31 May 2018			Cr
		$		$
	Vehicle running expenses	500	Gross profit	8000

The other expenses will be transferred to the profit and loss account in the same way.

Dr	Wages			Cr			
		$					$
May	Bank	100		May	31	Profit and loss	100

Dr	Loan interest			Cr			
		$					$
May	Bank	200		May	31	Profit and loss	200

Dr	Profit and loss account for the month ended 31 May 2018		Cr
	$		$
Vehicle running expenses	500	Gross profit	8000
Wages	100		
Loan interest	200		

How is the net profit recorded in the accounts?

Illustration 29

Completing the profit and loss account

If you look at the profit and loss account, you will see that the difference between the two sides is the net profit of $7200. The net profit is recorded as a debit entry in the profit and loss account.

Dr	Profit and loss account for the month ended 31 May 2018		Cr
	$		$
Vehicle running expenses	500	Gross profit	8000
Wages	100		
Loan interest	200		
Net profit	7200		

Step 4: Complete the double entry for net profit.

The matching credit entry for profit is made in the capital account, since it represents an increase in the value of the business.

Dr	Capital			Cr
	$			$
		May 1	Balance	15000
		31	Net profit	7200

The usual presentation of the trading account and the profit and loss account is in the form of an income statement. There is more about this form of presentation in Chapter 5.

Step 5: Prepare the statement of financial position (balance sheet).

The statement of financial position (balance sheet) for the end of May is shown below. It is important to remember that many of the accounts used during May are empty: that is, they have no balance, so they do not appear on the statement of financial position (balance sheet).

The following accounts are now empty and can be ignored when preparing the statement of financial position (balance sheet):

- sales
- wages
- purchases
- loan interest
- vehicle running expenses
- trading account
- profit and loss account.

The statement of financial position (balance sheet) is as follows.

Andy
Statement of financial position (balance sheet) at 31 May 2018

	$		$
ASSETS		CAPITAL	22 200
Vehicle	12 000		
Market stall	5 200	LIABILITIES	
Bank	9 000	Bank loan	4 000
	26 200		26 200

Practice questions

54. Preparing trading and profit and loss accounts

Amy owns a café and snack bar. The business's statement of financial position (balance sheet) on 1 August 2018 was as follows.

Amy
Statement of financial position (balance sheet) at 1 August 2018

	$		$
ASSETS		CAPITAL	23 900
Equipment	11 600		
Furniture	10 500	LIABILITIES	
Bank	2 900	Accounts payable	1 100
	25 000		25 000

During August, the following transactions occurred (all transactions affected the business's bank account):

	$
Purchased goods for resale	3 200
Sales of goods	9 900
Wages of assistants	800
Rent	700
Light and heat	600

a. Calculate the business's gross profit.
b. Calculate the business's net profit.
c. Record the transactions in ledger accounts.
d. Prepare a trading account for the month ended 31 August 2018 by transferring sales and purchases. Record the gross profit.

e. Prepare a profit and loss account for the month ended 31 August 2018 by transferring gross profit and expenses to this account and record the net profit.
f. Update the capital account with the net profit.
g. Prepare a statement of financial position (balance sheet) at 31 August 2018.

55. Preparing trading and profit and loss accounts

Neil owns a bakery. The business's statement of financial position (balance sheet) on 1 September 2018 was as follows.

Neil
Statement of financial position (balance sheet) at 1 September 2018

	$		$
ASSETS		CAPITAL	73600
Premises	65000		
Equipment	12200	LIABILITIES	
Bank	4400	Bank loan	8000
	81600		81600

During September, the following transactions occurred (all transactions affected the business's bank account):

	$
Purchased goods for resale	2100
Sales of goods	10300
Insurance	700
Loan interest	200
Wages	1100

a. Calculate the business's gross profit.
b. Calculate the business's net profit.
c. Record the transactions in ledger accounts.
d. Prepare a trading account for the month ended 30 September 2018 by transferring sales and purchases to this account and record the gross profit.
e. Prepare a profit and loss account for the month ended 30 September 2018 by transferring gross profit and expenses to this account and record the net profit.
f. Update the capital account with the net profit.
g. Prepare a statement of financial position (balance sheet) at 30 September 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

What happens if a business makes a loss?

A loss occurs when a business's expenses are greater than the gross profit made from selling goods. A loss means that the business has lost some of its resources (net assets) and that its capital has decreased.

Illustration 30

Recording a loss

The following information was extracted from a business's accounts at the end of its financial year, 31 December 2017:

	$
Capital, 1 January 2017	48 000
Gross profit for the year	14 200
Wages and salaries	13 600
Light and heat	2 800
Rent	2 800

The business's profit and loss account should appear as follows.

Dr	Profit and loss account for the year ended 31 December 2017			Cr
	$			$
Wages and salaries	13 600		Gross profit	14 200
Light and heat	2 800			
Rent	2 800			

The difference between the two sides is $5 000 and is a net loss (expenses are larger than gross profit). The double entry for the loss is:

- debit the capital account
- credit the profit and loss account.

Dr	Profit and loss account for the year ended 31 December 2017			Cr
	$			$
Wages and salaries	13 600		Gross profit	14 200
Light and heat	2 800		Net loss	5 000
Rent	2 800			

Dr			Capital				Cr
			$				$
May	31	Net loss	5 000	Jan	1	Balance	48 000

Practice questions

56. Preparing trading and profit and loss accounts where there is a net loss

Winston owns a gift shop. The business's statement of financial position (balance sheet) on 1 July 2018 was as follows.

Winston
Statement of financial position (balance sheet) at 1 July 2018

	$		$
ASSETS		CAPITAL	13 600
Furniture	11 200		
Equipment	3 200	LIABILITIES	
Bank	1 800	Accounts payable	2 600
	16 200		16 200

During July, the following transactions occurred (all transactions affected the business's bank account):

	$
Purchased goods for resale	5 300
Sales of goods	7 700
Rent	1 100
Light and heat	600
Wages	1 300

a. Calculate the business's gross profit.
b. Calculate the business's net loss.
c. Record the transactions in ledger accounts.
d. Prepare a trading account for the month ended 31 July 2018 by transferring sales and purchases to this account and record the gross profit.
e. Prepare a profit and loss account for the month ended 31 July 2018 by transferring gross profit and expenses to this account and record the net loss.
f. Update the capital account with the net loss.
g. Prepare a statement of financial position (balance sheet) at 31 July 2018.

57. Preparing trading and profit and loss accounts where there is a net loss

Dawn owns a business selling sportswear. The business's statement of financial position (balance sheet) on 1 April 2018 was as follows.

Dawn Statement of financial position (balance sheet) at 1 April 2018			
	$		$
ASSETS		CAPITAL	83 700
Premises	105 000		
Equipment	16 000	LIABILITIES	
Bank	2 700	Accounts payable	40 000
	123 700		123 700

During April, the following transactions occurred (all transactions affected the business's bank account):

	$
Purchased goods for resale	9 200
Sales of goods	12 900
Wages	3 100
Administration expenses	1 300
Loan interest	800

a. Calculate the business's gross profit.
b. Calculate the business's net loss.
c. Record the transactions in ledger accounts.
d. Prepare a trading account for the month ended 30 April 2018 by transferring sales and purchases to this account and record the gross profit.
e. Prepare a profit and loss account for the month ended 30 April 2018 by transferring gross profit and expenses to this account and record the net loss.
f. Update the capital account with the net loss.
g. Prepare a statement of financial position (balance sheet) at 30 April 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Completing the capital account at the end of a financial period

At the end of a financial period – usually every year – the capital account is completed by recording the net profit or net loss for the period, and by transferring the total drawings for the year to the debit side of the account.

Illustration 31

Completing a capital account

On 31 March 2018, the end of a business's financial year, the following information was available.

	$
Capital, 1 April 2017	82 000
Net profit for the year	18 900
Total drawings for the year	17 300

The capital and drawings accounts would appear as follows.

Dr	Drawings			Cr	
		$			$
	Balance	17 300			

Dr	Capital			Cr	
		$			$
			April	1	Balance	82 900
			March	31	Net profit	18 900

At this point the total amount shown in the drawings account would be transferred to the capital account. The double entry required is:

- debit the capital account
- credit the drawings account.

Dr	Drawings			Cr	
		$			$
	Balance	17 300	March	31	Capital	17 300

Dr	Capital			Cr	
		$			$
April	31	Drawings	17 300	April	1	Balance	82 000
				March	31	Net profit	18 900

Note:

- After the transfer of total drawings, the drawings account would be empty (have no balance).

Practice questions

58. Preparing a full set of accounting records

Thomas owns a health food shop. The business's statement of financial position (balance sheet) on 1 March 2018 was as follows.

Thomas
Statement of financial position (balance sheet) at 1 March 2018

	$		$
ASSETS		CAPITAL	34 900
Fittings	21 200		
Vehicle	16 400		
Accounts receivable	3 200	LIABILITIES	
Bank	2 400	Bank loan	6 000
Cash	500	Accounts payable	2 800
	43 700		43 700

During March, the following transactions occurred:

March	3	Purchased goods for resale on credit for $1 300
	4	Cash sales totalled $900
	7	Paid rent by cheque $1 000
	9	Received a cheque for $1 900 from a receivable
	10	Repaid part of bank loan, $500. Funds were transferred from the business's bank account
	11	Thomas withdrew $200 cash for private use
	14	Paid wages of $700 in cash
	17	Sales on credit totalled $2 400
	18	Paid loan interest, $400. Funds were transferred from the business's bank account
	21	Paid an account payable $1 000 by cheque
	22	Thomas withdrew a cheque for $700 for private use
	24	Purchased some additional fittings for $1 300 by cheque
	25	Cash sales totalled $1 400
	28	Paid wages of $800 in cash
	30	Transferred $700 cash to the bank account

a. Prepare ledger accounts to record these transactions.
b. Prepare a trial balance at 31 March 2018.
c. Prepare a trading account and a profit and loss account for the month ended 31 March 2018.
d. Complete the capital account by transferring the net profit and total drawings for the year.
e. Prepare a statement of financial position (balance sheet) at 31 March 2018.

59 Preparing a full set of accounting records

Maggie owns a grocery shop. The business's statement of financial position (balance sheet) on 1 September 2018 was as follows.

Maggie
Statement of financial position (balance sheet) at 1 September 2018

	$		$
ASSETS		CAPITAL	70 100
Premises	66 000		
Equipment	17 400		
Accounts receivable	300	LIABILITIES	
Bank	2 700	Bank loan	15 000
Cash	600	Accounts payable	1 900
	87 000		87 000

During September, the following transactions occurred:

Sept	4	Paid payable $1 800 by cheque
	5	Paid insurance by cheque $300
	7	Received $200 cash from receivable
	9	Cash sales totalled $3 300
	10	Sold some unwanted equipment, value $1 100, and received a cheque for that amount
	11	Maggie withdrew a cheque for $600 for private use
	13	Paid wages of $1 400 in cash
	17	Sales on credit totalled $600
	18	Cash sales totalled $2 800
	21	Purchased goods for resale on credit, value $2 300
	22	Paid insurance $100 in cash
	24	Maggie withdrew $300 cash for private use
	25	Purchased goods for resale and paid by cheque, $900
	28	Paid wages of $1 000 in cash
	30	Sold goods and received cheques totalling $1 300 that were banked

a. Prepare ledger accounts to record these transactions.
b. Prepare a trial balance at 30 September 2018.
c. Prepare a trading account and a profit and loss account for the month ended 30 September 2018.
d. Complete the capital account by transferring the net profit and total drawings for the year.
e. Prepare a statement of financial position (balance sheet) at 30 September 2018.

60. Preparing a full set of accounts starting from a trial balance

Bill is the owner of a general store. His business has been trading for 11 months and its trial balance at the end of this period is as follows.

Trial Balance at 1 December 2017		
	Dr	Cr
	$	$
Accounts payable		3 480
Accounts receivable	570	
Administration expenses	8 250	
Bank	3 190	
Bank loan		8 000
Capital		31 870
Cash	340	

Drawings	21 210	
Fittings	8 920	
Loan interest	640	
Purchases	83 470	
Rent	13 230	
Sales		141 300
Vehicle	13 500	
Wages	31 330	
	184 650	184 650

During December, the following transactions occurred:

Dec
- 2 Purchased goods for resale and paid by cheque $2 200
- 3 Cash sales totalled $5 220
- 6 Received $330 cash from an account receivable
- 8 Paid rent by cheque, $1 250
- 10 Repaid part of bank loan, $500. Funds were transferred from the bank account
- 13 Sales on credit totalled $210
- 15 Paid wages of $1 620 in cash
- 16 Bill withdrew $600 cash for private use
- 17 Paid administration expenses of $440 in cash
- 20 Cash sales totalled $3 130
- 22 Paid an account payable $2 600 by cheque
- 23 Purchased additional fittings and paid by cheque $970
- 28 Paid wages of $1 880 in cash
- 29 Cash sales totalled $2 440
- 30 Paid $6 200 cash into the bank account

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

a. Prepare ledger accounts to record these transactions.
b. Prepare a trial balance at 31 December 2017.
c. Prepare a trading account and a profit and loss account for the year ended 31 December 2017.
d. Complete the capital account by transferring the net profit and total drawings for the year.
e. Prepare a classified statement of financial position (balance sheet) at 31 December 2017.

2.8 Balancing and closing accounts

Objectives

By the end of this unit you will be able to:

- explain why accounts are balanced
- balance ledger accounts
- close accounts that do not have a balance
- prepare accounts that have a running balance.

Why are accounts balanced?

Over a period of time many of the ledger accounts you have been preparing could grow to a very large size. Even the smallest business will have hundreds – possibly thousands – of transactions to record over a period of a few months.

Balancing and **closing accounts** have the following benefits:

- they break up each record into more manageable chunks based on time periods
- they bring many accounts to a neat conclusion with a clear statement or update on the net value shown in the account (the balance)
- they bring records to a neat conclusion by clearly showing that there is no balance and that the account is now closed
- they provide summary information for the preparation of the trial balance and other financial statements.

The owner of a business could balance and close the accounting records at any time. In practice, balancing accounts will occur at regular intervals. This could be monthly for many accounts, possibly weekly for others. All accounts should be balanced or closed at the end of the financial year.

How are accounts balanced?

Accounts are balanced following a clear set of rules or steps that can be applied to almost every account that has some net value at a particular date.

Key terms

Balancing accounts: the process of working out the net amount left in an account and clearly stating this as a debit or credit balance at the beginning of the next accounting period.

Closing accounts: the process of completing an account that does not have a balance.

Illustration 32

Balancing an asset account

Here is a typical set of entries in a bank account.

Dr		Bank			Cr		
			$				$
May	1	Balance	1800	Sept	6	Purchases	200
	14	Sales	8000		10	Accounts payable	3500
	22	Accounts receivable	5300		14	Loan interest	100
					21	Drawings	800
			6300 15100		30	Salaries	4200
							8800

In order to balance the account the following steps are necessary:

Step 1: Calculate the balance. In this case, the total debit entries are $15 100 and the total credit entries are $8 800. You will remember from Unit 2.6 that it can be helpful to use pencil footings to record these totals before trying to work out the balance on the account. The balance is $6 300 ($15 100 less $8 800).

Step 2: Start the balancing process by recording the balance on the side of the account which has the smaller total value. As you would expect with an asset account, the side with the smaller total value in the bank account is the credit side – that is, the credit total of $8 800 is less than the debit total of $15 100.

Label this entry with the date (30 September, i.e. the last day of the month) and the narrative "Balance c/d".

Dr		Bank			Cr		
			$				$
Sept	1	Balance	1800	Sept	6	Purchases	200
	14	Sales	8000		10	Accounts payable	3500
	22	Accounts receivable	5300		14	Loan interest	100
					21	Drawings	800
			6300 15100		30	Salaries	4200
					30	**Balance c/d**	**6300**
							8800

Note:

- The abbreviation "c/d" means "carried down".

Step 3: By making the credit entry for $6 300, the two sides of the account now total the same amount ($15 100). The next step is to record this total on each side of the account.

Dr			Bank				Cr
			$				$
Sept	1	Balance	1800	Sept	6	Purchases	200
	14	Sales	8000		10	Accounts payable	3500
	22	Accounts receivable	5300		14	Loan interest	100
					21	Drawings	800
		6300	*15100*		30	Salaries	4200
					30	Balance c/d	6300
							8800
			15100				**15100**

Note:

- You will notice that the totals appear on the same line and that the next available line has been used.

Step 4: As you know, you cannot make a credit entry in the accounts without also having a matching debit entry. So, to complete the balancing process, make a matching debit entry in the bank account for the balance. This time label the balance "b/d" (brought down) and for the date use the first day of the next month (in this case, 1 October).

Dr			Bank				Cr
			$				$
Sept	1	Balance	1800	Sept	6	Purchases	200
	14	Sales	8000		10	Accounts payable	3500
	22	Accounts receivable	5300		14	Loan interest	100
					21	Drawings	800
		6300	*15100*		30	Salaries	4200
					30	Balance c/d	6300
							8800
			15100				15100
Oct	**1**	**Balance b/d**	**6300**				

You will see that the bank account is now ready for use during October, and that all of September's transactions have been neatly summarised by stating the net value at the end of September.

Illustration 33

Balancing a liability account

Here is a typical liability account.

Dr			Accounts payable				Cr
			$				$
June	10	Bank	2400	June	1	Balance	3300
					22	Purchases	500

Note:

- Remember you can use pencil footings if you like.

Following the same four steps:

Step 1: The balance on the account is $3 800 less $2 400 = $1 400.

Step 2: Record the balance c/d (dated 30 June) on the debit side because this is the side with the smaller total value.

Step 3: Record the totals on both sides of the account.

Step 4: Make a matching entry for the balance – in this case a credit entry. The balance b/d should be dated 1 July.

Dr			Accounts payable				Cr
			$				$
June	10	Bank	2 400	June	1	Balance	3 300
	30	**Balance c/d**	**1 400**		22	Purchases	500
			3 800				**3 800**
				July	**1**	**Balance b/d**	**1 400**

Illustration 34

Some more examples of balanced accounts

Balancing a capital account

Before balancing:

Dr			Capital				Cr
			$				$
Oct	31	Drawings	21 500	Oct	1	Balance	65 000
					31	Net profit	11 500

After balancing:

Dr			Capital				Cr
			$				$
Oct	31	Drawings	21 500	Oct	1	Balance	65 000
	31	**Balance c/d**	**55 000**		31	Net profit	11 500
			76 500				**76 500**
				Nov	**1**	**Balance b/d**	**55 000**

Balancing an account where the entries are all on one side

Sometimes accounts have entries that are all on one side. In this example, the only transactions affecting an account receivable have been additional sales on credit. The step-by-step balancing technique can be followed in the same way as in the previous examples.

Before balancing:

Dr			Accounts receivable				Cr
			$				$
April	1	Balance	6 000				
	13	Sales	2 000				
	27	Sales	1 000				

After balancing:

Dr			Accounts receivable				Cr
			$				$
April	1	Balance	6 000	**April**	**30**	**Balance c/d**	**9 000**
	13	Sales	2 000				
	27	Sales	1 000				
			9 000				**9 000**
May	**1**	**Balance b/d**	**9 000**				

Accounts where there is only one entry

Nothing needs to be done with an account with just one entry! Some accounts rarely have entries made in them. Do not be tempted to waste time balancing an account with just one entry – you will only end up where you started!

Before balancing:

Dr			Vehicles		Cr
			$		$
March	1	Balance	24 500		

After balancing:

Dr			Vehicles		Cr
			$		$
March	1	Balance	24 500		

Practice questions

61. Balancing asset accounts

Make a copy of the following cash account.

Dr			Cash				Cr
			$				$
Feb	1	Balance	450	Feb	8	Drawings	150
	14	Sales	1 200		24	Wages	990

Balance the account following these steps:

a. Calculate the balance on 28 February.
b. Record the balance to carry down on the side with the smaller total value.

c. Record totals on the debit and credit sides of the account.
d. Complete the double entry by recording the balance brought down dated 1 March.

62. Balancing asset accounts

Make a copy of the following bank account.

Dr		Bank				Cr	
			$				$
Oct	1	Balance	2 200	Oct	6	Accounts payable	1 400
	12	Cash	500		12	Insurance	300
	17	Accounts receivable	1 300		24	Drawings	400

Balance the account following these steps:

a. Calculate the balance on 31 October.
b. Record the balance to carry down on the side with the smaller total value.
c. Record totals on the debit and credit sides of the account.
d. Complete the double entry by recording the balance brought down dated 1 November.

63. Balancing liability accounts

Make a copy of the following bank loan account.

Dr		Bank loan				Cr	
			$				$
May	10	Bank	600	May	1	Balance	8 000

Balance the account following these steps:

a. Calculate the balance on 31 May.
b. Record the balance to carry down on the side with the smaller total value.
c. Record totals on the debit and credit sides of the account.
d. Complete the double entry by recording the balance brought down dated 1 June.

64. Balancing liability accounts

Make a copy of the following payables account.

Dr		Accounts payable				Cr	
			$				$
Dec	15	Bank	2 900	Dec	1	Balance	3 200
					28	Purchases	1 400

Balance the account following these steps:

a. Calculate the balance on 31 December.

b. Record the balance to carry down on the side with the smaller total value.
c. Record totals on the debit and credit sides of the account.
d. Complete the double entry by recording the balance brought down dated 1 January.

65. Balancing various accounts

Make a copy of the following accounts and balance each as appropriate.

Dr		Cash			Cr		
			$				$
Aug	1	Balance	370	Aug	12	Purchases	120
	14	Sales	130		28	Drawings	210

Dr		Capital			Cr		
			$				$
Aug	31	Drawings	11900	Aug	1	Balance	39400
					31	Net profit	18400

Dr		Premises			Cr
			$		$
Aug	1	Balance	74000		

Dr		Accounts receivable			Cr
			$		$
Aug	1	Balance	3600		
	26	Sales	1700		

Dr		Accounts payable			Cr		
			$				$
				Aug	1	Balance	2100
					11	Purchases	800
					25	Purchases	1300

66. Balancing various accounts

Make a copy of the following accounts and balance each as appropriate.

Dr		Bank			Cr		
			$				$
Jan	1	Balance	3240	Jan	8	Rent	1050
	15	Cash	620		14	Drawings	450
	28	Cash	290		29	Salaries	2140

Dr		Accounts payable			Cr		
			$				$
				Jan	1	Balance	4150
					16	Purchases	2040

Dr		Capital					Cr
			$				$
Jan	31	Drawings	3 870	Jan	1	Balance	62 100
					31	Net profit	15 080

Dr		Fittings					Cr
			$				$
Jan	1	Balance	14 900				

Dr		Equipment					Cr
			$				$
Jan	1	Balance	4 980				
	18	Bank	3 070				

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

How do you close accounts?

Many accounts do not have a balance at the end of an accounting period. This is often because the contents of the account have been transferred elsewhere. In Unit 2.5, accounts such as those for sales, expenses and drawings were "emptied" at the year end by transferring their contents to the trading, profit and loss or capital account. Where accounts have no balance, all that is necessary is to *record a total at the end of the accounting period*. Here are some examples.

Illustration 35

Closing accounts at the end of the financial period

Closing a sales account

Before closing:

Dr		Sales					Cr
			$				$
Dec	31	Trading	9 200	Dec	3	Cash	2 100
					5	Accounts receivable	600
					17	Cash	3 800
					30	Cash	2 700

After closing:

Dr		Sales					Cr
			$				$
Dec	31	Trading	9 200	Dec	3	Cash	2 100
					5	Accounts receivable	600
					17	Cash	3 800
					30	Cash	2 700
			9 200				9 200

Closing a drawings account

Before closing:

Dr			Drawings				Cr
			$				$
Jan	1	Bank	600	Jan	31	Capital	2000
	8	Cash	300				
	22	Bank	1100				

After closing:

Dr			Drawings				Cr
			$				$
Jan	1	Bank	600	Jan	31	Capital	2000
	8	Cash	300				
	22	Bank	1100				
			2000				2000

Closing an expense account

Before closing:

Dr			Wages				Cr
			$				$
May	14	Cash	750	May	31	Profit and loss	1500
	28	Cash	750				

After closing:

Dr			Wages				Cr
			$				$
May	14	Cash	750	May	31	Profit and loss	1500
	28	Cash	750				
			1500				1500

Closing an asset account with no balance

Before closing:

Dr			Accounts receivable				Cr
			$				$
Aug	1	Balance	2400	Aug	21	Bank	3600
	11	Sales	1200				

All accounts receivable have been paid, so there is no balance.

After closing:

Dr			Accounts receivable				Cr
			$				$
Aug	1	Balance	2400	Aug	21	Bank	3600
	11	Sales	1200				
			3600				3600

Closing an account with just one entry on each side

Here is an account with just one entry on each side and no balance.

Before closing:

Dr			Insurance				Cr
			$				$
Nov	12	Bank	1600	Nov	30	Profit and loss	1600

In this situation, it is unnecessary to record the total (which is, of course, the same as the amount of the entries). To show that the account is closed, just add double total lines.

After closing:

Dr			Insurance				Cr
			$				$
Nov	12	Bank	1600	Nov	30	Profit and loss	1600

Practice questions

67. Closing accounts

Make a copy of the following and close each account.

Dr			Purchases				Cr
			$				$
Oct	14	Bank	3820	Oct	31	Trading	5910
	29	Accounts payable	2090				

Dr			Sales				Cr
			$				$
Oct	31	Trading	7070	Oct	5	Cash	1250
					11	Bank	3780
					25	Accounts receivable	2040

Dr			Rent				Cr
			$				$
Oct	11	Bank	3750	Oct	31	Profit and loss	3750

Dr			Accounts receivable				Cr
			$				$
Oct	1	Balance	4240	Oct	29	Bank	6280
	25	Sales	2040				

Dr		Trading account for the month ended 31 October 2018			Cr
			$		$
Oct		Purchases	5910	Sales	7070
		Gross profit	1160		

68. Closing accounts

Make a copy of the following and close each account.

Dr		Sales			Cr		
			$				$
April	30	Trading	5810	April	7	Bank	3720
					14	Accounts receivable	2090

Dr		Wages			Cr		
			$				$
April	14	Cash	2640	April	30	Profit and loss	4910
	28	Cash	2270				

Dr		General expenses			Cr		
			$				$
April	6	Bank	320	April	30	Profit and loss	410
	18	Cash	90				

Dr		Accounts payable			Cr		
			$				$
April	29	Bank	3770	April	1	Balance	1040
					17	Purchases	2730

Dr	Profit and loss account for the month ended 30 April 2018		Cr	
		$		$
	Wages	4910	Gross profit	12880
	General expenses	410		
	Insurance	560		
	Net profit	7000		

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Preparing accounts with running balances

By now you will be very familiar with two-sided ledger accounts. However, you have probably noticed that electronic accounting software packages do not use this particular format. All accounting systems follow the rules you have been learning for double entry but use a layout for an account that includes a debit column, credit column and a column to record the balance, which is updated after every transaction. Look, for example, at a bank statement.

The following example shows both the familiar two-sided ledger account and the "running balance" format.

Illustration 36

Preparing an account with a running balance

The following two-sided ledger account appeared in a business's books of account.

Dr			Bank				Cr
			$				$
Feb	1	Balance	750	Feb	6	Rent	340
	12	Cash	1060		14	Insurance	270
	26	Receivable	880		18	Payable	190
					24	Drawings	320
					27	Salaries	650
					28	Balance c/d	920
			2690				2690
Mar	1	Balance b/d	920				

Here is the same account shown as it would appear using an electronic system.

Bank						
Date		Details	Dr	Cr	Balance	
			$	$	$	
Feb	1	Balance			750	Dr
	6	Rent		340	410	Dr
	12	Cash	1060		1470	Dr
	14	Insurance		270	1200	Dr
	18	Payable		190	1010	Dr
	24	Drawings		320	690	Dr
	26	Receivable	880		1570	Dr
	27	Salaries		650	920	Dr

You will notice that the transactions are recorded in date order and the entries are made as before in the debit or credit columns as appropriate. However, after each transaction the balance is updated and clearly labelled either Dr or Cr. Here the balance is labelled Dr to signify that the account has a debit balance throughout the month.

An accounting software package will, of course, automatically calculate the balance after each transaction is entered. You could use this layout for your manual accounts, but it would be a lot of work to calculate the balance after each transaction.

Practice questions

69. Calculating running balances

Here is a receivables account taken from the books of a business. The format used has been designed to show a running balance.

Accounts receivable						
Date		Details	Dr	Cr	Balance	
			$	$	$	
June	1	Balance			4800	Dr
	11	Sales	3450			
	17	Bank		3600		
	24	Sales	1400			
	30	Bank		2900		

Complete both parts of the balance column for each of the transactions.

70. Calculating running balances

Here is a payables account taken from the books of a business. The format used has been designed to show a running balance.

Accounts payable						
Date		Details	Dr	Cr	Balance	
			$	$	$	
Aug	1	Balance			2700	Cr
	5	Purchases		7400		
	11	Purchases		1200		
	18	Bank	6300			
	24	Bank	3500			

Complete both parts of the balance column for each of the transactions.

71. Preparing accounts with running balances

Here are a cash account and payables account taken from the books of a business. They are shown in the familiar two-sided form.

Dr			Cash				Cr
			$				$
May	1	Balance	630	May	8	Office expenses	170
	22	Sales	1050		17	Drawings	80
					22	Bank	1200
					31	Balance c/d	230
			1680				1680
June	1	Balance b/d	230				

Dr			Accounts payable				Cr
			$				$
May	25	Bank	2300	May	1	Balance	1820
	31	Balance c/d	960		17	Purchases	1440
			3260				3260
				June	1	Balance b/d	960

Prepare new versions of each of these accounts using the running balance format.

72. Preparing accounts with running balances

Here are a bank account and bank loan account taken from the books of a business. They are shown in the familiar two-sided form.

Dr			Bank				Cr
			$				$
Sept	1	Balance	1420	Sept	8	Drawings	520
	11	Sales	1600		11	Purchases	200
	18	Cash	750		27	Balance c/d	1580
					30		1470
			3770				3770
Oct	1	Balance b/d	1470				

Dr			Bank loan				Cr
			$				$
Sept	10	Bank	600	Sept	1	Balance	10 000
	30	Balance c/d	12 400		15	Bank	3000
			13 000				13 000
				Oct	1	Balance b/d	12 400

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Prepare new versions of each of these accounts using the running balance format.

Summary: the rules for balancing and closing accounts

Balancing accounts		Closing accounts	
Accounts with at least two entries	Accounts with just one entry	Several entries on either side	Just one entry on each side
Step 1: Calculate balance Step 2: Record balance on side with smaller total Step 3: Record totals Step 4: Bring balance down to opposite side with a matching entry	Do not balance	Record totals	Add total lines

Practice question

73. Preparing a set of accounts and balancing and closing the accounts at the end of the accounting period

Mike is the owner of a business selling furniture. His business's trial balance on 30 November 2018 was as follows.

Trial balance at 30 November 2018		
	Dr $	Cr $
Accounts payable		5840
Accounts receivable	3140	
Bank	2040	
Capital		124650
Cash	310	
Drawings	17490	
Equipment	12200	
General expenses	2080	
Insurance	3650	
Premises	88000	
Purchases	142300	
Sales		238560
Vehicle	31000	
Wages	66840	
	369050	369050

During December the following transactions occurred:

Dec 1 Sales on credit totalled $4560
5 Paid an account payable $5840 by cheque
8 Received cheques from accounts receivable of $6400
14 Purchased goods for resale and paid by cheque, $1290
18 Purchased some additional equipment and paid by cheque, $860
22 Cash sales totalled $2180
23 Paid wages of $1450 in cash
28 Mike withdrew $290 cash for private use

a. Open an account for each item listed in the trial balance on 30 November.
b. Record the transactions for December 2018.
c. Prepare a trial balance at 31 December 2018.
d. Prepare a trading account and a profit and loss account for the year ended 31 December 2018.
e. Complete the capital account by transferring the net profit and total drawings for the year.
f. Complete the ledger accounts by closing or balancing accounts.
g. Prepare a classified statement of financial position (balance sheet) at 31 December 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. Which one of the following accounts normally has a debit balance?
   - A Bank loan
   - B Accounts payable
   - C Furniture
   - D Sales

2. Which one of the following accounts normally has a credit balance?
   - A Purchases
   - B Accounts receivable
   - C Cash
   - D Bank loan

3. Josie owns a grocery business. Which one of the following entries correctly records the purchase of a delivery vehicle on credit from Supa Vehicles Ltd for use by the business?
   - A Debit Delivery vehicle; Credit Bank
   - B Debit Purchases; Credit Supa Vehicle Ltd
   - C Debit Supa Vehicle Ltd; Credit Purchases
   - D Debit Delivery vehicle; Credit Supa Vehicle Ltd

4. The owner of a business paid cash held in the office into the business's bank account. Which of the following entries correctly records this transaction?
   - A Debit Bank; Credit Cash
   - B Debit Cash; Credit Sales
   - C Debit Bank; Credit Capital
   - D Debit Cash; Credit Bank

5. In a business's accounts the accounts receivable account has a debit balance of $800. The following items have not yet been recorded in this account:
   - sales on credit to accounts receivable $600
   - receipts from accounts receivable $700

   When these items have been entered into the accounts receivable account, what will the balance be?
   - A Dr $2 100
   - B Dr $900
   - C Dr $700
   - D Cr $500

6. In a trial balance, which one of the following should be correctly shown as a debit balance?
   - A Capital
   - B Accounts payable
   - C Loan interest
   - D Sales

7. In a trial balance, which one of the following should be correctly shown as a credit balance?
   - A Accounts receivable
   - B General expenses
   - C Purchases
   - D Sales

8. A business's trial balance included the following items:

	$
Bank	3 000
Drawings	4 000
Expenses	4 000
Purchases	18 000
Sales	30 000

   Based on this information, the business made a net profit of:
   - A $12 000
   - B $8 000
   - C $4 000
   - D $1 000

9. The following accounts appeared in a business's accounts at the year end. Which has not been correctly balanced or closed?

A

Dr	Bank		Cr	
	$			$
Balance	380		Payments	470
Receipts	290		Balance b/d	200
	670			670
Balance c/d	200			

B

Dr	Accounts payable		Cr	
	$			$
Bank	2800		Balance	3200
Balance c/d	400			
	3200			3200
			Balance b/d	400

C

Dr	Drawings		Cr	
	$			$
Bank	220		Capital	840
Cash	620			
	840			840

D

Dr	Premises		Cr	
	$			$
Balance	82 000			

10. The owner of a business decided to purchase a new vehicle for use by his business. The owner also decided to make a gift of the business's existing vehicle to his wife. Which of the following entries correctly records the gift in the business's accounts?

A Debit Bank; Credit Capital
B Debit Drawings; Credit Vehicle
C Debit Vehicle; Credit Capital
D Debit Capital; Credit Bank

PAPER 2

Here are four case studies that bring together all the techniques you have learned to date.

Case study 1: Carlos (straightforward)

This case study requires the preparation of accounts from the opening of a business to a trial balance.

Carlos opened a sports equipment business on 1 February 2018. On 1 February he paid $40 000 of his private funds into a business's bank account.

The following transactions occurred during the first month in business:

Feb 2 Arranged a loan from the bank for $10 000. This amount was transferred into the business's bank account
3 Paid rent of business premises by cheque, $2 300
7 Purchased goods for resale for $15 400 and paid by cheque
9 Purchased a vehicle for business use for $21 000 and paid by cheque
14 Cash sales totalled $3 600
15 Carlos withdrew $400 cash for private use
16 Sales on credit totalled $1 800
17 Paid insurance, $500, in cash

22 Purchased goods for resale on credit, value $3 700
23 Received cheques for $700 from receivables
24 Paid an account payable $3 500 by cheque
25 Transferred $2 500 cash to the business's bank account

a. Record all these transactions in ledger accounts.
b. Prepare a trial balance dated 28 February 2018.

Note:

- There is no need to balance or close any accounts; trading and profit and loss accounts and a final statement of financial position (balance sheet) are not required.

Case study 2: Maria (more difficult)

This case study requires the preparation of accounts from the opening of a business to a trial balance.

Maria opened a fashion shop on 1 May 2018. On 1 May, Maria provided the following assets: vehicle $11 800, furniture $3 900, bank $5 400.

The following transactions occurred during the first month in business:

May 3 Purchased goods for resale on credit $4 735
5 Withdrew $325 from the business's bank account for use in making cash payments by the business
6 Maria withdrew a cheque for $148 for private use
9 Cash sales totalled $1 684
11 Paid staff wages of $489 in cash
14 Sales on credit totalled $2 427
17 Paid rent of premises by cheque, $822
18 Paid vehicle running expenses of $95 in cash
19 Maria made a gift of $30 to a friend, using the business's cash
21 Received cheques for $1 931 from accounts receivable
25 Paid staff wages of $823 in cash
26 Paid $390 cash into the business's bank account
30 A member of staff told Maria that he had been overpaid on 25 May and returned $32 cash

a. Record all these transactions in ledger accounts.
b. Prepare a trial balance dated 31 May 2018.

Note:

- There is no need to balance or close any accounts; trading and profit and loss accounts and a final statement of financial position (balance sheet) are not required.

Case study 3: Harry (straightforward)

This case study requires the recording of transactions in a set of accounts, plus trading and profit and loss accounts and a final statement of financial position (balance sheet).

Harry owns a furniture store. The following trial balance was extracted from his business's books of account, after 11 months of trading, on 31 March 2018.

Trial balance at 31 March 2018		
	Dr	Cr
	$	$
Accounts payable		3700
Accounts receivable	1400	
Administration expenses	3200	
Bank	5100	
Capital		140000
Cash	600	
Drawings	26500	
Equipment	22400	
General expenses	3900	
Purchases	56800	
Premises	95000	
Sales		153300
Vehicle	18000	
Wages	64100	
	297000	297000

The following transactions occurred during April 2018:

April 4 Paid administration expenses by cheque, $400
5 Cash sales totalled $4800
7 Harry withdrew $600 cash for private use
11 Purchased additional equipment for $3600 and paid by cheque
12 Received cheques for $1100 from receivables
14 Purchased goods for resale on credit, value $6800
18 Sales on credit totalled $6200
19 Paid general expenses of $300 in cash
20 Cash sales totalled $4700
21 Paid $1200 cash into the business's bank account
25 Paid wages of $6200 in cash
28 Paid an account payable $2000 by cheque

a. Record all these transactions in ledger accounts.
b. Prepare a trial balance dated 30 April 2018.
c. Prepare a trading account and a profit and loss account for the year ended 30 April 2018.
d. Complete the capital account by transferring the net profit and total drawings for the year.
e. Complete the ledger accounts by closing or balancing accounts.
f. Prepare a classified statement of financial position (balance sheet) at 30 April 2018.

Case study 4: Sophie (more difficult)

This case study requires the recording of transactions in a set of accounts, plus trading and profit and loss accounts and a final statement of financial position (balance sheet).

Sophie owns a bookshop. The following trial balance was extracted from her business's books of account, after eleven months of trading, on 30 June 2018.

Trial balance at 30 June 2018		
	Dr	Cr
	$	$
Accounts payable		3700
Accounts receivable	883	
Bank	4920	
Bank loan		15000
Capital		28556
Cash	372	

Drawings	19 630	
Equipment	8 500	
Fixtures and fittings	6 200	
General expenses	5 121	
Light and heat	576	
Loan interest	684	
Purchases	49 667	
Rent	11 490	
Sales		103 229
Vehicle	14 000	
Wages	28 442	
	150 485	150 485

The following transactions occurred during July 2018:

July 4 Paid an account payable $1 650 by cheque

5 Cash sales totalled $1 064

7 Paid rent of $1 200 by cheque

11 Received cheques totalling $638 from receivables

12 Purchased goods for resale on credit, value $1 640

13 Received a cheque for $120 for over-payment of rent on 7 July

15 Purchased some new fittings and paid by cheque, $860

18 Paid general expenses with $449 cash

19 Sophie withdrew $180 cash for private use

20 Returned some of the new fittings purchased on 15 July to the supplier, value $290, and received a cheque for this amount

21 Paid loan interest of $88. Funds were transferred from the business's bank account

25 Cash sales totalled $1 720

26 Paid wages of $1 547 in cash

27 Sold some unwanted equipment, value $550, and received cash for this amount.

28 Sold goods on credit, value $691

29 Sophie withdrew a cheque for $520 for private use

29 Paid surplus cash into the bank account, leaving a balance of $250 in the cash account

a. Record all these transactions in ledger accounts.

b. Prepare a trial balance dated 31 July 2018.

c. Prepare a trading account and a profit and loss account for the year ended 31 July 2018.

d. Complete the capital account by transferring the net profit and total drawings for the year.

e. Complete the ledger accounts by closing or balancing accounts.

f. Prepare a classified statement of financial position (balance sheet) at 31 July 2018.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260.

3 Books of original entry

Setting the scene

At this stage in your study of accounting, you will be familiar with:

- recording a range of transactions in ledger accounts
- producing a trial balance to check the accuracy of your record keeping
- preparing end-of-period income statements made up of trading and profit and loss accounts to show the gross and net profit made by the business
- preparing an end-of-period statement of financial position (balance sheet) that summarises the business's assets, liabilities and capital at that date.

In this chapter the accounting system is going to be extended to take account of the following developments:

- Details about accounting transactions are found on what are called source documents.
- Before entries are made in ledger accounts for individual transactions, there is a preliminary stage where the key facts about transactions are recorded first in what are called **books of original entry**. There are seven books of original entry.
- Instead of having just one account to record transactions affecting accounts payable, from now on each credit supplier will have a personal account. These personal accounts – one for each account payable – will be collected together and kept in a purchases ledger.
- A similar process will apply to credit customers. There will be a separate account for each account receivable, and these individual accounts will be collected together and kept in a sales ledger.
- Finally, it is possible for substantial reductions to be made in the price of products being purchased and sold by businesses where certain conditions are met. You will be shown how to calculate and record this reduction, which is called a trade discount.

Link

The seven books of original entry are as follows:

1. purchases book (see Unit 3.1) or purchases journal
2. sales book (see Unit 3.1) or sales journal
3. purchases returns book (see Unit 3.2) or purchases returns journal
4. sales returns book (see Unit 3.2) or sales returns journal
5. cash book (see Unit 3.3)
6. petty cash book (see Unit 3.4)
7. general journal (see Unit 3.5).

Key term

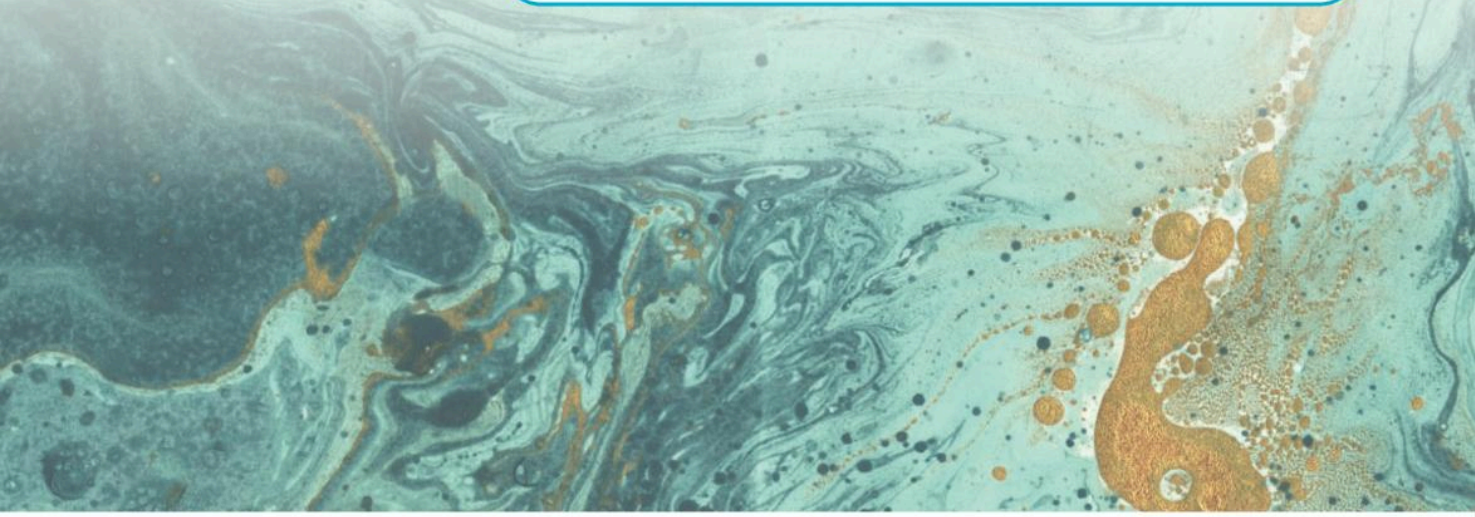
Books of original entry: books of first entry where transactions are listed prior to being posted to the double-entry records. These are sometimes called books of prime (first) entry.

Key term

Source document: a written document that provides information from which accounting records can be prepared. It provides evidence that a particular transaction took place.

Source documents

So far, you have prepared accounting records from a list of transactions presented in date order. In reality, whoever prepares the accounting records of a business relies on the information shown on documents – known as **source documents** – rather than a neat list of transactions. These documents are received from, or sent out to, other businesses and organizations. Each document is used as a source of information and the bookkeeper or accounts clerk extracts whatever details are needed for the accounting records from each document as it is received or issued by the business.



Syllabus coverage

	Syllabus	Unit
1	Explain the uses of books of original entry	3.1–3.5
2	Distinguish between cash and credit transactions	
3	Identify source documents related to books of original entry	
4	Prepare source documents for use in transaction descriptions	3.6
5	Translate source documents into transaction descriptions	
6	Use source documents to make entries into books of original entry	3.1–3.5
7	Distinguish between trade and cash discounts	3.1–3.3
8	Distinguish between discounts allowed and discounts received	3.3
9	Balance cash books	
10	Interpret the balances of the cash books	
11	Indicate the treatment of totals from books of original entry	3.1–3.5

3.1 Recording credit purchases and credit sales

Objectives

By the end of this unit you will be able to:

- identify the source documents used when recording credit purchases and credit sales
- prepare a purchases book and a sales book
- post the details recorded in the purchases book and sales book to accounts in the general, purchases and sales ledgers
- use folio references when preparing accounting records for credit purchases and credit sales
- explain what is meant by the term "trade discount"
- prepare accounting records based on source documents that include a trade discount.

Recording credit purchases in a purchases book

As purchase invoices are received, the following important information is recorded first in what is called a **purchases book**:

- date
- name of supplier
- invoice number
- amount due.

Illustration 1

Source document for credit purchases

Whenever a business purchases goods for resale on credit, as well as taking delivery of the goods it will receive a document from the supplier called an invoice or, to be more exact, a **purchases invoice**. Here is an example of a purchases invoice.

INVOICE No. J3082

West Bay Supplies

To: Kingford stores
Date: 14 June 2018

Quantity	*Description*	*Unit price* $	*Total* $
40 packets	Kitchen roll	1.20	48.00
15 cartons	Tastie snacks	2.80	42.00
20 tins	Supa cookies	0.90	18.00
		TOTAL AMOUNT DUE	**108.00**

Terms: payment within 30 days

Tip

Purchases books are sometimes given an alternative title. You may come across the following:

- purchases journal
- purchases day book.

Key terms

Purchases book: a book of original entry used to record purchases of goods on credit. The information required to prepare this book is taken from purchases invoices.

Purchase invoice: the source document that provides information about goods (or services) purchased on credit, particularly the amount due.

Notes:

- The purchases book is just a listing of important information shown on individual invoices.
- The purchases book is not part of the double-entry records.
- The purchases book only contains information about credit purchases of goods for resale. It does not include information about cash purchases or about the purchase of non-current assets.
- The details should be recorded in strict date order.
- The purchases book should be totalled at agreed intervals, e.g. monthly, although this could be more frequent if there is a large volume of transactions.
- The column marked 'folio' is used when the details are posted to the ledger accounts (see below).
- The purchases book will have page numbers.

This document tells you that:

- Kingford Stores has purchased goods from a supplier, West Bay Supplies
- the transaction is dated 14 June 2018
- the total amount due for the goods received is $108.

These are the key facts that Kingford Stores' bookkeeper will need to know in order to update the business's accounting records.

The purchases invoice also has a number (J3082), which could be useful in identifying this particular document.

The invoice gives details about the goods supplied and individual prices. Invoices can run into many pages of such detail. From the accounting point of view, however, it is the final total that matters.

At the end of the invoice there is a reference to 'terms'. These are the conditions for payment. In other words, the supplier expects Kingford Stores to pay this invoice before 14 July 2018. The owner of Kingford Stores will need to be aware of this information to ensure payment is made by this date; otherwise there is the risk of upsetting an important supplier.

Illustration 2

Recording purchases invoices in a purchases book

Elizabeth owns a hardware store. During April 2018 she received the following purchases invoices from her suppliers for goods for resale:

April	7	Invoice 2845	Purchase invoice received from Bell Ltd for goods, $785
	11	Invoice 3901	Purchase invoice received from R Khan for goods, $1 450
	22	Invoice 0783	Purchase invoice received from Aldo Ltd for goods, $2 440
	29	Invoice 0442	Purchase invoice received from L Samson for goods, $635

As each invoice is received, the following entries are made in the purchases book.

PURCHASES BOOK					Page 1
Date		Supplier	Invoice number	Folio	$
April	7	Bell Ltd	2845		785
April	11	R Khan	3901		1450
April	22	Aldo Ltd	0783		2440
April	29	L Sampson	0442		635
Total purchases					5310

Tip

Invoices contain a considerable amount of additional information that is likely to be of value to the business, although this information will not normally be required for the accounting records. Examples include:

- address of supplier and/or customer
- purchase order reference
- contact names.

Posting credit purchases of goods for resale

As you know, the correct double entry for the purchase of goods for resale on credit is:

- debit the purchases account
- credit the accounts payable.

This rule still applies. However, instead of having just one account for accounts payable, each supplier will be given their own account. It is important that the owner of the business knows how much is owed to each account payable, not just the total amount owing to all suppliers. These accounts of payables are normally maintained in a separate ledger called the **purchases ledger**.

Instead of making a separate debit entry in the purchases account for each transaction, it is usual to use the total shown at the end of the purchases book and update the purchases account with credit purchases at regular intervals, for example once a month.

The purchases account (along with all the other accounts except receivables and payables accounts) will be found in what is called the **general ledger**.

The information to make these entries will be taken from the purchases book. This process is often called '**posting** the purchases book'.

Each account payable will have a number and accounts will be kept within the purchases ledger in numerical order. The number of this account is entered in the folio column in the purchases book, but only after each entry has been posted from the purchases book to the account payble affected. Each account within the general ledger will also be numbered, so the purchases account will have a number. When information is posted from the purchases book to the general ledger the number of the account will be recorded in the folio column in the purchases book.

Ledger accounts also have folio columns and when information is posted from a book of original entry, reference is made to the books of original entry and the particular page number in the books of original

Tip

All invoices (and other source documents) must be kept carefully by a business and stored in such a way that any individual source document can be found easily. The source documents are the proof that transactions took place, so they might be required at any time to justify an entry in the accounting system.

Key terms

Purchases ledger: a part of the double-entry system that is used to keep the accounts of individual credit suppliers (accounts payable).

General ledger: a part of the double-entry system that is used to keep all the accounts other than those for accounts payables (kept in the purchases ledger) and accounts receivables (kept in the sales ledger).

Posting: transferring data from the books of original entry.

Folio references: a system of numbering pages and/or individual accounts that enables quick reference to the source of an entry in the double-entry system.

Notes:

- The posting to each payable account should be made as soon as possible after the purchase invoice has been listed in the purchases book. This will ensure that the owner has up-to-date information about how much is owed to each account payable. As the posting is made, the folio references are also recorded.
- The single entry in the purchases account matches the four individual credit entries. The usual narrative used is 'Purchases book', but 'Accounts payable' would also be acceptable.
- If there is a gap in the folio column in the books of original entry (in this case, the purchases book), this would normally indicate that the entry has not yet been posted to the ledger.

entry from which the information was taken. This system of cross referencing – called **folio references** – helps a bookkeeper to check the source of information in the accounts; it also helps the bookkeeper to check that all books of original entry records have been posted to the ledger accounts.

Illustration 3

Posting a purchases book

Using the information from Illustration 2, the accounting records should appear as follows.

Here is the purchases book again, this time with the folio references inserted.

PURCHASES BOOK					Page 3
Date		Supplier	Invoice number	Folio	$
April	7	Bell Ltd	2845	PL2	785
	11	R Khan	3901	PL3	1450
	22	Aldo Ltd	0783	PL1	2440
	29	L Sampson	0442	PL4	635
Total purchases				GL23	5310

Here are the double-entry records for these purchases on credit:

PURCHASES LEDGER

Dr	Aldo Ltd (Account No. 1)				Cr
	$				$
		April	22	Purchases PB3	2440

Dr	Bell Ltd (Account No. 2)				Cr
	$				$
		April	7	Purchases PB3	785

Dr	Dr R Khan (Account No. 3)				Cr
	$				$
		April	11	Purchases PB3	1450

Dr	Dr L Sampson (Account No. 4)				Cr
	$				$
		April	29	Purchases PB3	635

GENERAL LEDGER

Dr	Purchases (Account No. 23)				Cr
	$				$
April 30	Purchases book	PB	5310		

Practice questions

1. Recording credit purchases in a purchases book and posting to ledger accounts

Becky owns a shoe shop. During May 2018, she received the following purchase invoices:

May 3	Invoice 2730	Purchase invoice received from Whiteford Ltd for goods, $1 230
May 11	Invoice 9702	Purchase invoice received from P Sackley for goods, $2 720
May 24	Invoice 1818	Purchase invoice received from A Hereton for goods, $990
May 27	Invoice 2823	Purchase invoice received from Whiteford Ltd for goods, $2 440

Prepare the accounting records necessary to record these transactions:

a. purchases book
b. payable accounts in the purchases ledger
c. purchases account in the general ledger.

Invent suitable folio references.

2. Recording credit purchases in a purchases book and posting to ledger accounts

Alan owns a retail unit selling men's clothing. During January 2018, he received the following purchase invoices:

Prepare the accounting records necessary to record these transactions:

Jan 6	Invoice 3372	Purchase invoice received from Disley Ltd for goods, $630
Jan 11	Invoice 4941	Purchase invoice received from P Harlew for goods, $1 080
Jan 21	Invoice 3418	Purchase invoice received from Disley Ltd for goods, $1 250
Jan 27	Invoice 5053	Purchase invoice received from P Harlew for goods, $1 640

a. purchases book
b. payable accounts in the purchases ledger
c. purchases account in the general ledger.

Invent suitable folio references.

Tip

Don't forget that the purchases book is only used to record credit purchases of goods for resale. It is easy to enter cash purchases or the purchases of a non-current asset in the purchases book by mistake.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Key terms

Sales invoice: the source document that provides information about goods (or services) sold on credit.

Sales book: the book of original entry used to record the sale of goods on credit. The information required to prepare this book is taken from the sales invoices. This book of original entry is sometimes called the sales journal.

Sales ledger: a part of the double-entry system that is used to keep the accounts of individual credit customers (accounts receivable).

Processing credit sales

The revised process for recording credit purchases can also be applied to recording credit sales.

When a business sells goods on credit it will issue an invoice to the customer. The business will keep a copy of this document – the **sales invoice** – which can then be used to make entries in its books of account in the following sequence:

Step 1: Key details from the sales invoice will be recorded in the **sales book**.

Step 2: An account for the receivable will be opened in the **sales ledger** and a debit entry made to record the amount the customer owes. A folio reference will be made to the page in the sales book in the sales ledger account and a folio reference made to the account number in the sales book.

Step 3: At regular intervals (possibly monthly), the total of the sales book will be credited to the sales account that is kept in the general ledger. A folio reference will be made to the page in the sales book and a folio reference made to the account number in the sales book.

You will notice that this new process still has the same basic double entry for a credit sale that you used in the previous chapter, that is:

- debit the account receivable
- credit the sales account.

Illustration 4

Recording credit sales

Jamie owns a furniture store. During March 2018 he issued the following invoices to credit customers.

March 3	Invoice 377	Sales invoice sent to Batfo Ltd for $1 080
March 14	Invoice 378	Sales invoice sent to H Denman for $740
March 18	Invoice 379	Sales invoice sent to Jakex Ltd for $2 320
March 22	Invoice 380	Sales invoice sent to Quilfon Ltd for $1 440

As these invoices are issued the following record should be made in the sales book.

SALES BOOK				Page 7
Date	Supplier	Invoice number	Folio	$
March 3	Bafto Ltd	377		1 080
14	H Denman	378		740
18	Jakex Ltd	379		2 320
22	Quilfon Ltd	380		1 440
Total sales				5 580

Each entry in the sales book should be posted immediately to an individual account for each receivable in the sales ledger. The owner of the business will want to have up-to-date information about how much is owed by each individual customer.

This is how the sales book will appear with the folio references completed.

SALES BOOK					Page 7
Date		Supplier	Invoice number	Folio	$
March	3	Bafto Ltd	377	SL1	1080
	14	H Denman	378	SL2	740
	18	Jakex Ltd	379	SL3	2320
	22	Quilfon Ltd	380	SL4	1440
Total sales				GL29	5580

By the end of March the following entries should have been made.

SALES LEDGER

Dr		Batfo Ltd (Account No. 1)			Cr		
				$			$
March	3	Sales	SB7	1080			

Dr		H Denman (Account No. 2)			Cr		
				$			$
March	14	Sales	SB7	740			

Dr		Jakex Ltd (Account No. 3)			Cr		
				$			$
March	18	Sales	SB7	2320			

Dr		Quilfon Ltd (Account No. 4)			Cr		
				$			$
March	22	Sales	SB7	1440			

At the end of the month the sales account should be updated with just one total entry to match these four debit entries. This requires the posting of the total of the sales book.

GENERAL LEDGER

Dr		Sales (Account No. 9)			Cr		
				$			$
					March	3	Sales book	SB7	5580

Sales books are sometimes given an alternative title. You may come across the following:

- sales journal
- sales book.

Notes:

- The sales book is not part of the double-entry records.
- The sales book only contains information about credit sales. It does not include information about cash sales or about the sale of non-current assets.
- The details should be recorded in strict date order.
- An alternative narrative to the one shown in the sales account is 'accounts receivables'.

Link

Books of original entry are a vital source of information for an important checking process called 'control accounts'. The books of original entry totals are used in control accounts, which are fully explained in Chapter 7.

Tip

The sales book is only used to record sales of goods on credit. Do not include cash sales or the sales of non-current assets in this book of original entry.

Practice questions

3. Recording credit sales in a sales book and posting to ledger accounts

Amy owns a shop selling the latest music technology. During August 2018, she issued the following sales invoices to customers:

Aug 5	Invoice T339	Sales invoice sent to Bartford Ltd for goods, $1 480
Aug 10	Invoice T340	Sales invoice sent to J Williams for goods, $920
Aug 23	Invoice T341	Sales invoice sent to Bartford Ltd for goods, $2 840
Aug 28	Invoice T342	Sales invoice sent to J Williams for goods, $1 550

Prepare the accounting records necessary to record these transactions:

a. sales book
b. receivable accounts in the sales ledger
c. sales account in the general ledger.

Invent suitable folio references.

4. Recording credit sales in a sales book and posting to ledger accounts

Stephen owns a retail unit selling kitchen equipment. During June 2018, he issued the following sales invoices to customers:

June 2	Invoice W1131	Sales invoice sent to Hopford Kitchens Ltd for goods, $3 740
June 12	Invoice W1132	Sales invoice sent to A Bandle for goods, $2 670
June 15	Invoice W1133	Sales invoice sent to Hopford Kitchens Ltd for goods, $5 090
June 29	Invoice W1134	Sales invoice sent to A Bandle for goods, $1 480

Prepare the accounting records necessary to record these transactions:

a. sales book
b. receivable accounts in the sales ledger
c. sales account in the general ledger.

Invent suitable folio references.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Trade discount

A **trade discount** is the reduction in the price to be charged for goods. However, the following important conditions normally apply to this form of discount:

- trade discount is only offered to other businesses engaged in the same line of activity
- trade discounts are given for large orders.

Key term

Trade discount: a reduction in price given as a reward for buying in large quantities.

Tip

Wholesalers are businesses that purchase goods from manufacturers or producers and sell on to retailers.

Retailers are businesses that provide goods for private individuals.

Illustration 5

Trade discounts

GCK Wholesalers sells refrigerators. Its price list shows that the normal selling price of Model 2TB is $320.

GCK Wholesalers has just received two orders:

- A private individual wishes to purchase one Model 2TB refrigerator.
- J Hudson, a retailer of electrical goods, wishes to purchase ten Model 2TB refrigerators.

The private individual will be charged the normal selling price of $320.

But J Hudson, a retailer in the same line of business, could be offered a trade discount for placing a large order. Trade discounts are usually expressed as percentages and can be large in amount. So, if the retailer, J Hudson, was allowed a trade discount of say 25%, the amount charged for the order would be calculated as follows.

	$
10 Model 2TB refrigerators, normal price $320 each	3 200
Less 25% trade discount	800
Amount charged	2 400

In effect, the retailer pays only $240 for each refrigerator, while the private individual is charged the full price of $320.

Practice questions

5. Calculating trade discounts

James and Alvo Ltd is a wholesaler of bicycles.

The company buys goods from a number of bicycle manufacturers. Manufacturers offer trade discounts for large orders.

During October 2018, the following invoices were received:

Oct 12	Purchase invoice received from Melfin Ltd for 20 bicycles with a price of $160 each. The invoice showed the deduction of a trade discount of 25%.
Oct 28	Purchase invoice received from Harvey Bikes for 15 bicycles with a price of $430 each. The invoice showed the deduction of a trade discount of 33 ⅓ %.

James and Alvo Ltd sells bicycles to many retailers.

During October 2018, the following invoices were issued:

Oct 7	Sales invoice sent to W Gifford for 6 bicycles with a price of $400 each. The invoice showed the deduction of a trade discount of 20%.
Oct 26	Sales invoice sent to T Perry for 8 bicycles with a price of $330 each. The invoice showed the deduction of a trade discount of 15%.

Calculate the actual amount charged for each purchase and sale.

6. Calculating trade discounts

Belvo Wholesale sells fishing equipment.

The company buys goods from a number of manufacturers of fishing equipment. Manufacturers offer trade discounts for large orders. During June 2018, the following invoices were received:

June 5	Purchase invoice received from Seaspray & Co. Ltd for fishing equipment with a price of $8400. The invoice showed the deduction of a trade discount of 25%.
June 19	Purchase invoice received from Angling Supplies Ltd for fishing equipment with a price of $5800. The invoice showed the deduction of a trade discount of 20%.

Belvo Wholesale sells fishing equipment to many retailers.

During June 2018 the following invoices were issued:

June 8	Sales invoice sent to McEwan & Sons for fishing equipment with a price of $1200. The invoice showed the deduction of a trade discount of 15%.
June 23	Sales invoice sent to Jarel Fishing Supplies for equipment with a price of $1830. The invoice showed the deduction of a trade discount of 33 ⅓ %.

Calculate the actual amount charged for each purchase and sale.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Accounting records and trade discount

Invoices usually show detailed information about the normal price for the goods and any trade discount that is being deducted.

Illustration 6

Purchase invoice including trade discount

PURCHASE INVOICE No. P2771

Batford Wholesalers Ltd

To: Saintford Retail Stores
Date: 31 August 2018

Quantity	*Description*	*Unit price* $	*Total* $
300 tins	Emulsion paint code 3D24	2.40	720.00
500 tins	Emulsion paint code 4X68	2.80	1 400.00
		SUBTOTAL	**2 120.00**
LESS	20% trade discount		424.00
		AMOUNT DUE	**1 696.00**

In this example, the most important fact is the amount charged: $1 696. It is this fact that will be recorded in the accounting system. No record will be made of the normal price of the paint or the trade discount. What matters is always the amount actually charged.

Illustration 7

Accounting records and trade discount

Lendford Wholesalers received the following invoices during September 2018:

Sept 8	Purchase invoice T2734 received from JFZ Manufacturers. The normal price of the goods was $7 500. The invoice showed the deduction of a 20% trade discount.
Sept 22	Purchase invoice W4987 received from Dedo Manufacturing Company. The normal price of the goods was $14 800. The invoice showed the deduction of a 25% trade discount.

Lendford Wholesalers issued the following invoices during September 2018:

Sept 12	Sales invoice N835 sent to Amberly Stores. The normal price of the goods was $2 800. The invoice showed the deduction of a 10% trade discount.
Sept 27	Sales invoice N836 sent to Fanford Retail Stores. The normal price of the goods was $6 600. The invoice showed the deduction of a 15% trade discount.

Step 1: Calculate the amount actually charged for the goods on each of these invoices.

Purchase invoices:

JFZ Manufacturers (8 September)	$
Goods at normal selling price	7 500
Less 20% trade discount	1 500
Amount charged	6 000

Dedo Manufacturing Company (22 September)	$
Goods at normal selling price	14 800
Less 25% trade discount	3 700
Amount charged	11 100

Sales invoices:

Amberly Stores (12 September)	$
Goods at normal selling price	2 800
Less 10% trade discount	280
Amount charged	2 520

Fanford Retail Stores (27 September)	$
Goods at normal selling price	6 600
Less 15% trade discount	990
Amount charged	5 610

Step 2: Prepare the purchases and sales books.

PURCHASES BOOK					Page 4
Date		Supplier	Invoice number	Folio	$
Sept	8	JFZ Manufacturers	T2734	PL2	6 000
	22	Dedo Manufacturing Company	W4987	PL3	11 100
Total purchases				GL17	17 100

SALES BOOK					Page 7
Date		Supplier	Invoice number	Folio	$
Sept	12	Amberly Stores	N835	SL1	2 520
	27	Fanford Retail Stores	N836	SL2	5 610
Total sales				GL24	8 130

Tip

Remember that the amount of trade discount is not recorded in the accounting system – only the net amount after deducting trade discount is shown in the books of original entry and ledger accounts. There is no such thing as a trade discount account.

Note: the amount entered in the book is the net amount actually charged by the supplier or charged to the customer.

Step 3: Post the books of original entry to the purchases, sales and general ledgers.

PURCHASES LEDGER

Dr	JFZ Manufacturers (Account No. 1)				Cr
		$			$
			Sept 8	Purchases PB4	6 000

Dr	Dedo Manufacturing Company (Account No. 2)				Cr
		$			$
			Sept 22	Purchases PB4	11 100

SALES LEDGER

Dr	Amberly Stores (Account No. 1)				Cr
				$	$
Sept	12	Sales	SB7	2 520	

Dr	Fanford Retail Stores (Account No. 2)				Cr
				$	$
March	27	Sales	SB7	5 610	

GENERAL LEDGER

Dr	Purchases (Account No. 17)				Cr
				$	$
Sept	30	Purchases book	SB7	17 100	

Dr	Sales (Account No. 24)				Cr
		$			$
			Sept 30	Sales book SB7	8 130

Tip

Do not be misled into thinking that the purchases account should appear in the purchases ledger, or that the sales account should be in the sales ledger.

Remember the purchases account and sales account are both part of the general ledger.

Tip

Working with percentages.

It may be some time since you had to use percentages.

You will probably remember that 1% means one in every hundred. So, fractions and decimals can also be expressed as percentages.

$1\% = \frac{1}{100} = 0.01$

Here is a quick reminder about some percentages that are often used in accounting.

$5\% = \frac{5}{100} \left(\text{or } \frac{1}{20}\right) = 0.05$

$10\% = \frac{10}{100} \left(\text{or } \frac{1}{10}\right) = 0.1$

$15\% = \frac{15}{100} \left(\text{or } \frac{3}{20}\right) = 0.15$

$20\% = \frac{20}{100} \left(\text{or } \frac{1}{5}\right) = 0.2$

$25\% = \frac{25}{100} \left(\text{or } \frac{1}{4}\right) = 0.25$

$50\% = \frac{50}{100} \left(\text{or } \frac{1}{2}\right) = 0.5$

$75\% = \frac{75}{100} \left(\text{or } \frac{3}{4}\right) = 0.75$

Tip

There are two percentages to be careful about:

- 33⅓%: this percentage is the equivalent of ⅓ (one-third); it is sometimes written as 33.33%.
- 66⅔%: this percentage is the equivalent of ⅔ (two-thirds); it is sometimes written as 66.66% or 66.67%.

Why do you need to be careful?

- 33.33% is not an exact equivalent of one-third (because it should be written as "33.3̇, recurring").
- 66.66% or 66.67% is not an exact equivalent of two-thirds (because it should be written as "66.6̇, recurring").

If you are using your calculator with these percentages you are in danger of getting a slightly inaccurate result if you key in 33.33% or 66.66%.

When using a calculator for 33.33% always divide by 3 (one-third); for 66.67% always multiply by 2 and divide by 3 (two-thirds).

As an experiment, try working out 33⅓% of 9. The answer is, of course, 3. If you use 33.33% in your calculator, however, you are likely to obtain the answer 2.9997!

Practice questions

7. Recording invoices with trade discount in books of original entry and ledger accounts

Use the information in Question 5 to prepare the following accounting records in the books of James and Alvo Ltd:

a. purchases book
b. sales book
c. purchases ledger accounts
d. sales ledger accounts
e. appropriate general ledger accounts.

Invent suitable invoice numbers and folio references.

8. Recording invoices with trade discount in books of original entry and ledger accounts

Use the information in Question 6 to prepare the following accounting records in the books of Belvo Wholesale:

a. purchases book
b. sales book
c. purchases ledger accounts
d. sales ledger accounts
e. appropriate general ledger accounts.

Invent suitable invoice numbers and folio references.

9. Prepare a full accounting system including purchases and sales books up to the trial balance

Uwanna owns a wholesale business. Her business's trial balance on 30 April 2018 was as follows.

Trial balance at 30 April 2018		
	Dr	Cr
	$	$
Accounts payable:		
TBX Manufacturing Ltd		8 300
Universal Supplies Ltd		10 100
Accounts receivable:		
Shivan Retail Unit	11 300	
Williams Retail Chain	5 780	
Bank	12 580	
Capital		166 000
Cash	2 180	
Drawings	38 600	
Furniture and fittings	37 300	
General expenses	28 900	
Purchases	147 200	
Sales		232 440
Vehicles	44 800	
Wages	88 200	
	416 840	416 840

During May 2018 the following transactions occurred.

Invoices received from suppliers:

May 14	TBX Manufacturing Ltd (invoice 3251): for goods $6 200, less a trade discount of 25%
May 16	Universal Supplies Ltd (invoice 4481): for goods $9 600, less a trade discount of 33⅓%

Invoices sent to customers:

May 7	Shivan Retail Unit (invoice 1082): for goods $3 600, less a trade discount of 15%
May 17	Williams Retail Chain (invoice 1083): for goods $5 500, less a trade discount of 20%

Other transactions:

May 4	Cash sales totalled $2 800
9	Paid general expenses by cheque, $1 700
13	Received a cheque from Shivan Retail Unit for $8 400

Tip

E&OE: some invoices show this abbreviation at the end of the document. It means 'errors and omissions excepted'. In other words, if a mistake has been made in preparing the invoice, the business sending the invoice has the right to make a correction.

16	Paid Universal Supplies Ltd by cheque in full settlement of the amount due at this date
20	Purchased goods for resale and paid by cheque, $4 900
25	Paid wages of $3 900 in cash
28	Uwanna withdrew a cheque for $800 for private use

Prepare the following:

a. purchases book
b. sales book
c. purchases ledger accounts
d. sales ledger accounts
e. general ledger accounts
f. trial balance at 31 May 2018.

Use folio references in the purchases book, sales book and purchases and sales ledger accounts. It is not necessary to balance accounts. An income statement (trading and profit and loss account) and a statement of financial position (balance sheet) are not required.

10. Prepare a full accounting system including purchases and sales books up to the trial balance

Rakesh owns a wholesale business providing office supplies. His business's trial balance on 31 July 2018 was as follows.

Trial balance at 31 July 2018		
	Dr	Cr
	$	$
Accounts payable:		
Kingbridge Manufacturing Co.		36 380
Leon Products Ltd		22 410
Accounts receivable:		
Latoya Retail Unit	12 320	
Murray Stationery	5 440	
Bank	14 850	
Bank loan		50 000
Bank loan interest	3 360	
Capital		426 000
Cash	4 970	
Drawings	38 450	
General expenses	31 375	
Premises	600 000	
Purchases	535 280	
Sales		847 685
Vehicles	68 000	
Wages	68 430	
	1 382 475	1 382 475

During August 2018, the following transactions occurred.

Invoices received from suppliers:

Aug 5	Kingbridge Manufacturing Co. (invoice 384): for goods $26 700, less a trade discount of 33 ⅓%
Aug 21	Leon Products Ltd (invoice 8630): for goods $15 600, less a trade discount of 25%

Invoices sent to customers:

Aug 9	Latoya Retail Unit (invoice 2293): for goods $8 300, less a trade discount of 20%
Aug 23	Murray Stationery (invoice 2294): for goods $4 400, less a trade discount of 15%

Other transactions:

Aug 6	Rakesh withdrew a cheque for $700 for private use
8	Purchased goods for resale and paid by cheque, $5 400
11	Paid loan interest $380. Funds were transferred from the business's bank account
17	Paid Leon Products Ltd by cheque in full settlement of the amount due at this date
22	Cash sales totalled $6 860
24	Paid wages of $5 580 in cash
27	Received a cheque from Latoya Retail Unit for the amount due on this date
29	Paid general expenses of $2 150 by cheque

Prepare the following:

a. purchases book
b. sales book
c. purchases ledger accounts
d. sales ledger accounts
e. general ledger accounts
f. trial balance at 31 August 2018.

Use folio references in the purchases book, sales book and purchases and sales ledger accounts. It is not necessary to balance accounts. An income statement (trading and profit and loss account) and a statement of financial position (balance sheet) are not required.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

3.2 The returns books

Objectives

By the end of this unit you will be able to:

- identify the source documents used when recording sales returns (returns inwards) and purchases returns (returns outwards)
- prepare a sales returns book (returns inwards book) and purchases returns book (returns outwords book)
- post the details recorded in the sales returns book (returns inwards book) and purchases returns book (returns outwards book) to accounts in the general, sales and purchases ledgers including the use of folio references.

Purchases returns

It is not unusual for a business to return goods to suppliers that have previously been purchased on credit. This can happen when some items in a delivery are:

- damaged or broken
- not as ordered (wrong model, wrong size, wrong colour, etc.)
- received too late ('sell by' date exceeded).

Key term

Purchases returns: goods sent back by a business to the supplier. Also known as "returns outwards".

The return of goods to a supplier is often referred to as **purchases returns** (or returns outwards or 'returns out' as the goods are going 'out' of the business and back to the supplier). The double-entry record for purchases returns is as follows:

- debit the account of the supplier (account payable)
- credit a purchases returns account.

This is demonstrated in this example:

PURCHASES LEDGER

Dr	Supplier (account payable)		Cr	
		$		$
	Purchases returns	xxxx		

GENERAL LEDGER

Dr	Purchases returns		Cr	
		$		$
			Supplier (account payable)	xxxx

At the end of a financial period, the total of purchases returns is deducted from the total purchases to give a net figure for purchases for the period.

Source documents for purchases returns

As you know, all entries in the double-entry records should be supported by source documents.

The usual source document for purchases returns is a **credit note**, which is sent by the supplier to the business that has received damaged or unwanted goods to notify them of the amount that can be deducted from the invoice.

Illustration 8

Credit note

The following is a credit note issued by McKoy Wholesale Ltd.

CREDIT NOTE No. 623

McKoy Wholesale Ltd

To: Scarborough Retail Stores
Date: 18 August 2018

Quantity	*Description*	*Unit price* $	*Total* $
12 boxes	Detergent	15.30	183.60
	less 20% trade discount		36.72
		NET	**146.88**

Goods returned damaged in transit

This document tells you that the customer (Scarborough Retail Stores) has returned some damaged goods to the supplier (McKoy Wholesale Ltd).

This credit note has been prepared by the supplier and sent to the customer to confirm the amount which can deducted from the invoice ($146.88). The owner of Scarborough Retail Stores will use it as the source document for preparing the double-entry records.

Purchases returns book/returns outwards book

The book of original entry used to list all credit notes received from suppliers before posting the information to the ledger is called the **purchases returns book**.

Key terms

Credit note: the source document that records the amount to be deducted from (or allowed against) a previous invoice to avoid a business being overcharged – usually the business has returned goods to the supplier.

Purchases returns book: a book of original entry used to record in date order goods returned to credit suppliers with information taken from credit notes received; also known as the "returns outwards book".

Notes:

- The process for recording purchases returns is very similar to that for credit purchases and credit sales, including the use of folio references.
- Credit notes received from suppliers are listed in date order in the purchases returns book. The personal accounts in the purchases ledger are updated immediately.
- At the end of the month (or more frequently if desired), the book is totalled and the total of returns outwards is posted to the general ledger account.
- An acceptable alternative narrative to the one shown is 'accounts payable'.

Illustration 9

Preparing and posting a purchases returns book

Here is an example of a completed returns outwards book that has been posted to the relevant ledger accounts.

PURCHASES RETURNS BOOK				Page 2
Date	Supplier	Credit note number	Folio	$
Sept 14	Bennett & Co.	347	PL1	112
Sept 27	Mungroo Ltd	1279	PL2	273
Total purchases returns			GL18	385

Here are the double-entry records for these returns outwards:

PURCHASES LEDGER

Dr	Bennett & Co. (Account No. 1)			Cr			
				$			$
Sept 14	Purchases returns	PRB2		112			

Dr	Mungroo Ltd (Account No. 2)			Cr			
				$			$
Sept 27	Purchases returns	PRB2		273			

GENERAL LEDGER

Dr	Purchases returns (Account No. 18)			Cr			
				$			$
					Sept 30	Purchases returns book	PRB2 385

Alternative source document for purchases returns/returns outwards

Sometimes a document called a **debit note** is used as the evidence for a purchases return. Here is the process that would be used:

Step 1: The customer receives a consignment of goods and an invoice.

Step 2: The customer notices some damaged/unwanted items.

Step 3: The customer returns the damaged/unwanted items to the supplier and, at the same time, the customer prepares a debit note listing the items being returned and the amounts that should be deducted from the invoice sent with the whole consignment.

Step 4: The debit note is used to make the appropriate entry in the purchases returns book, which is then posted to the ledger accounts.

Key term

Debit note: a source document that is sometimes used when a business sends goods back to a supplier, and is then used as evidence for entries for purchases returns.

Practice questions

11. Recording purchases returns

Kerron owns a shop supplying fishing tackle. During March 2018, he returned goods to suppliers that had previously been purchased on credit and received the following credit notes:

March 11	Credit note 242	Goods returned to Scott Ltd with a value of $275
March 18	Credit note 375	Goods returned to Taylor & Sons with a value of $328
March 29	Credit note 247	Goods returned to Scott Ltd. These goods had been invoiced at $550 less a trade discount of 20%

Prepare the records required in Kerron's books of account to record these transactions:

a. purchases returns book
b. accounts payable in the purchases ledger
c. purchases returns account in the general ledger.

Invent suitable folio references.

12. Recording purchases returns

Faye owns a shop selling household goods. During July 2018, she returned goods to suppliers that had previously been purchased on credit and received the following credit notes:

July 4	Credit note 331	Goods returned to Segicore Ltd with a value of $297
July 15	Credit note 829	Goods returned to J Howell with a value of $115
July 26	Credit note 337	Goods returned to Segicore Ltd. These goods had been invoiced at $840 less a trade discount of 25%

Prepare the records required in Faye's books of account to record these transactions:

a. returns outwards book
b. accounts payable in the purchases ledger
c. purchases returns account in the general ledger.

Invent suitable folio references.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Sales returns/returns inwards

Businesses that receive goods back from credit customers will need to make records of these **sales returns**. The accounting procedure follows a similar sequence to that described for purchases returns.

Key term

Sales returns: goods that a business receives back from credit customers. Also known as "returns inwards".

Tip

Sometimes you will find alternative terms are used for books of original entry relating to returns:

Sales returns book:
- Returns inwards book
- Returns inwards journal
- Returns inwards day book

Purchases returns book:
- Returns outwards book
- Returns outwards journal
- Returns outwards day book

The basic double-entry record for returns inwards is:
- debit a sales returns account
- credit the account of the customer (account receivable).

At the end of the financial period, the total of sales returns will be deducted from the total sales to give the net sales for the period.

A business receiving back goods from a dissatisfied credit customer will make out a credit note, send the original version to the customer and keep a copy from which the accounting records can be prepared.

Sales returns are sometimes referred to as: 'returns inwards' or 'returns in'.

Illustration 10

Preparing and posting a sales returns book

Here is an example of a completed sales returns book that has been posted to the relevant ledger accounts.

SALES RETURNS BOOK				Page 5
Date	Supplier	Credit note number	Folio	$
Jan 9	Garcia Ltd	103	SL1	23
Jan 23	Rampersad & Co.	104	SL2	119
Total sales returns			GL25	142

Here are the double-entry records for these returns inwards:

SALES LEDGER

Dr	Garcia Ltd (Account No. 1)				Cr
	$				$
		Jan 9	Sales returns	SRB5	23

Dr	Rampersad & Co. (Account No. 2)				Cr
	$				$
		Jan 23	Sales returns	SRB5	119

GENERAL LEDGER

Dr	Returns Inwards (Account No. 25)				Cr
			$		$
Jan 31	Sales returns book	SRB5	142		

Notes:

- Copies of credit notes issued to customers are listed in date order in the sales returns book. The personal accounts in the sales ledger are updated immediately.
- At regular intervals, the book is totalled and the total of sales returns is posted to the general ledger account.
- An acceptable alternative narrative to the one shown is 'accounts receivable'.

Practice questions

13. Recording returns inwards

Laurelle owns a business supplying car accessories to local garages and car dealers. During June 2018, credit customers returned goods that had been sold to them on credit:

June 11	Credit note 454	Goods returned by Parsed Garages Ltd with a value of $220
June 13	Credit note 455	Goods returned by Beretta Car Dealers with a value of $507
June 24	Credit note 456	Goods returned by Parsed Garages Ltd. These goods had been invoiced at $1 500 less a trade discount of 33⅓%

Prepare the records required in Laurelle's books of account to record these transactions:

a. sales returns book
b. accounts receivable in the sales ledger
c. sales returns account in the general ledger.

Invent suitable folio references.

14. Recording returns inwards

Mikhail owns a business supplying designer clothes to retailers in the region. During October 2018, credit customers returned goods that had been sold to them on credit:

Oct 9	Credit note 756	Goods returned by Castries Designwear with a value of $474
Oct 20	Credit note 757	Goods returned by Garcia Ltd with a value of $232
Oct 23	Credit note 758	Goods returned by Garcia Ltd. These goods had been invoiced at $1 640 less a trade discount of 15%

Prepare the records required in Mikhail's books of account to record these transactions:

a. sales returns book
b. accounts receivable in the sales ledger
c. sales inwards account in the general ledger.

Invent suitable folio references.

15. Preparing a full accounting system up to the trial balance

Rishi owns a wholesale business supplying music technology to retailers in the region. His business's trial balance on 31 January 2018 was as follows.

Trial balance at 31 January 2018		
	Dr	Cr
	$	$
Accounts payable:		
HTL Manufacturing		11450
Khan's Supplies Ltd		6380
Accounts receivable:		
Hunter & Sons	2690	
Quinlan Music Shop	3200	
Administration expenses	36480	
Bank	3620	
Capital		381400
Cash	1850	
Drawings	27280	
Non-current assets	440000	
Purchases	348200	
Purchases returns		6490
Sales		585000
Sales returns	5860	
Selling expenses	11200	
Wages and salaries	110340	
	990720	990720

During February 2018 the following transactions occurred.

Invoices received from suppliers:

Feb 6	HTL Manufacturing (invoice 559): for goods $7 500, less a trade discount of 33 ⅓ %
Feb 19	Khan's Supplies Ltd (invoice T307): for goods $6 200, less a trade discount of 25%

Invoices sent to customers:

Feb 5	Hunter & Sons (invoice 4561): for goods $1 550, less a trade discount of 20%
Feb 20	Quinlan Music Shop (invoice 4562): for goods $3 300, less a trade discount of 25%

Credit notes received from suppliers:

Feb 12	HTL Manufacturing (credit note 308): for goods supplied on 6 Feb, $420, less a trade discount of 33⅓% – not as ordered
Feb 28	Khan's Supplies Ltd (credit note R119): for goods supplied on 19 Feb, $880, less a trade discount of 25% – damaged in transit

Credit notes issued to customers:

Feb 8	Hunter & Sons (credit note 181): for goods supplied on 5 February, $250, less a trade discount of 20% – received in a damaged condition
Feb 27	Quinlan Music Shop (credit note 182): for goods supplied on 20 February, $260, less a trade discount of 25% – not as ordered

Other transactions:

Feb 5	Paid administration expenses of $380 in cash
Feb 9	Received a cheque from Hunter & Sons for the amount due on 1 February
Feb 11	Cash sales totalled $15 450
Feb 12	Paid $15 200 cash into the business's bank account
Feb 15	Paid HTL Manufacturing by cheque in full settlement of the amount due at 1 February
Feb 18	Purchased goods for resale and paid by cheque, $3 200
Feb 25	Paid wages and salaries of $6 120 by cheque
Feb 28	Rishi withdrew $740 cash for private use

Prepare the following:

a. purchases book
b. sales book
c. purchases returns book
d. sales returns book
e. purchases ledger accounts
f. sales ledger accounts
g. general ledger accounts
h. trial balance dated 28 February 2018.

Use folio references in the books of original entry and the purchases and sales ledger accounts.

It is not necessary to balance accounts. An income statement and a statement of financial position (balance sheet) are not required.

16. Preparing a full accounting system up to the trial balance

Sonya is the owner of a business that supplies local retailers with kitchen equipment. Her business's trial balance on 30 September 2018 was as follows.

Trial balance at 30 September 2018		
	Dr $	Cr $
Accounts payable:		
LPC Kitchen Supplies		4480
Nana's Kitchens Ltd		8460
Accounts receivable:		
Johnson Kitchen Shop	1070	
TK Watson	4320	
Bank	7310	
Capital		224900
Cash	940	
Drawings	35480	
General expenses	4600	
Non-current assets	212000	
Purchases	264270	
Purchases returns		7060
Rent	36350	
Sales		409510
Sales returns	4490	
Wages	83580	
	654410	654410

During October 2018 the following transactions occurred.

Invoices received from suppliers:

Oct 3	LPC Kitchen Supplies (invoice 617): for goods, $5120, less a trade discount of 25%
Oct 11	Nana's Kitchens Ltd (invoice W311): for goods, $4800, less a trade discount of 20%

Invoices sent to customers:

Oct 14	Johnson Kitchen Shop (invoice 2121): for goods, $6240, less a trade discount of 33⅓%
Oct 23	TK Watson (invoice 2122): for goods, $1600, less a trade discount of 15%

Credit notes received from suppliers:

Oct 7	LPC Kitchen Supplies (credit note 113): for goods supplied on 3 October, $320, less a trade discount of 25% – some goods received in a damaged condition
Oct 18	Nana's Kitchens Ltd (credit note D008): for goods supplied on 11 October, $680, less a trade discount of 20% – not as ordered

Credit notes issued to customers:

Oct 22	Johnson Kitchen Shop (credit note 226): for goods supplied on 14 October, $420, less a trade discount of 33⅓% – not as ordered
Oct 30	TK Watson (credit note 227): for goods supplied on 23 October, $200, less a trade discount of 15% – damaged items

Other transactions:

Oct 4	Paid rent of $3 100 by cheque
Oct 8	Paid Nana's Kitchens Ltd the amount due on 1 October
Oct 11	Purchased goods for resale by cheque, $2 700
Oct 16	Sonya withdrew $400 cash for her private use
Oct 21	Paid general expenses of $680 by cheque
Oct 25	Cash sales totalled $3 660
Oct 28	Received a cheque from Johnson Kitchen Shop in full settlement of the amount due on this date
Oct 29	Paid cash into bank, leaving a cash balance of $750

Prepare the following:

a. purchases book
b. sales book
c. purchases returns book
d. sales returns book
e. purchases ledger accounts
f. sales ledger accounts
g. general ledger accounts
h. trial balance dated 31 October 2018.

Use folio references in the books of original entry and purchases and sales ledger accounts.

It is not necessary to balance accounts. An income statement and a statement of financial position (balance sheet) are not required.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Recording returns in the end-of-year financial statements

At the end of a financial period it is important to remember to transfer the totals of the returns accounts in the general ledger to the trading account section of the income statement.

Illustration 11

Recording returns in the trading account

On 31 December 2018, the following accounts appeared in the books of Perrier & Sons:

	$
Purchases	430 000
Returns inwards	40 000
Returns outwards	30 000
Sales	680 000

The ledger accounts should appear as follows, closed on transfer of the balances to the trading account section of the income statement.

Tip

A common mistake is to mix up the entries for returns in the trading account.

Remember:

- returns outwards is deducted from purchases
- returns inwards is deducted from sales.

Notes:

- The idea is to show net purchases and net sales in the trading account.
- Two columns have been used on each side of the account. In the case of the debit side, this is done in order to clearly separate the detailed information about purchases and purchases returns from the net purchases figure. In the case of the credit side, this is done in order to clearly separate the detailed information about sales less sales returns from the net sales figure.
- Remember that the trading account and statement of profit and loss each form part of what is now called a business's income statement.

GENERAL LEDGER

Dr — Purchases — Cr

			$				$
Dec	31	Balance	430 000	Dec	31	Trading account	430 000

Dr — Returns Inwards — Cr

			$				$
Dec	31	Balance	40 000	Dec	31	Trading account	40 000

Dr — Returns Outwards — Cr

			$				$
Dec	31	Trading account	30 000	Dec	31	Balance	30 000

Dr — Sales — Cr

			$				$
Dec	31	Trading account	680 000	Dec	31	Balance	680 000

Here is the trading account section of the income statement.

Dr — Trading account for the year ended 31 December 2018 — Cr

	$	$		$	$
Purchases	430 000		Sales	680 000	
Less returns outwards	30 000		Less returns inwards	40 000	
		400 000			640 000
Gross profit		240 000			
		640 000			640 000

Tip

Transferring returns accounts to the trading account: if you look at the example of the trading account you may think at first glance that the rules of double entry are not being followed in the treatment of the returns accounts.

Taking purchases returns as an example, it appears that:

- a debit entry has been made in the purchases returns account to close the account
- another debit entry has been made in the trading account for purchases returns.

These entries can look confusing! But look again: you will see that what appears to be a debit entry for purchases returns in the trading account is not really that at all. In fact, purchases returns is being deducted from the debit side, not added.

A similar point applies to sales returns.

Practice questions

17. Preparing end-of-year financial statements

The following trial balance was extracted from the books of account of P Hosein at the end of the business's financial year.

Trial balance at 31 December 2018		
	Dr	Cr
	$	$
Accounts payable		22 420
Accounts receivable	16 380	
Bank	5 950	
Bank loan		20 000
Bank loan interest	1 540	
Capital		115 000
Cash	2 020	
Drawings	32 600	
Furniture and fittings	48 400	
General expenses	17 590	
Purchases	288 470	
Purchases returns		5 440
Rent	33 800	
Sales		403 810
Sales returns	7 130	
Vehicle	38 500	
Wages	74 290	
	566 670	566 670

Prepare the following:

a. income statement (trading and profit and loss account) for the year ended 31 December 2018

b. statement of financial position (balance sheet) at 31 December 2018 (classified).

18. Preparing end-of-year financial statements

Tamara owns a retail business. Her business's financial year ended on 31 August 2018, when the following trial balance was extracted from the books of account.

Trial balance at 31 August 2018		
	Dr	Cr
	$	$
Accounts payable		22 480
Accounts receivable	24 730	
Administration expenses	3 580	
Bank	8 410	
Capital		421 400
Cash	720	
Drawings	28 400	
Equipment	33 600	
Insurance	7 150	
Premises	520 000	
Purchases	407 380	
Purchases returns		9 360
Salaries	105 400	
Sales		737 770
Sales returns	11 210	
Selling expenses	5 030	
Vehicle	35 400	
	1 191 010	1 191 010

Prepare the following:

a. income statement (trading and profit and loss account) for the year ended 31 August 2018

b. statement of financial position (balance sheet) at 31 August 2018 (classified).

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

3.3 The cash book

Objectives

By the end of this unit you will be able to:

- identify the source documents used when recording cash and bank transactions
- prepare a two-column cash book and post details to ledger accounts, including the use of folio references
- explain why cash discounts may be offered
- prepare a three-column cash book and post details to ledger accounts, including the use of folio columns.

You will now be used to the idea that a fully developed accounting system requires the following processes:

Collecting together relevant *source documents* as evidence of transactions

↓

Recording key data from source documents in the form of lists in *subsidiary books*

↓

Double-entry records of each transaction using information shown in subsidiary books

This process will now be applied to the recording of money transactions.

Source documents for money transactions

The following tables summarise some of the main means of receiving and paying money.

Cash transactions			
	Source document	Explanation	Entry required
Receipts	Cash register tapes or till rolls	Used as evidence of cash sales: cash registers retain a record of every individual "cash" transaction. Cash sales include the receipt from the customer of notes and coins, cheques, debit card payments and credit card payments.	Debit the cash account
	Copy of cash receipt	Occasionally a handwritten cash receipt could be issued to those giving the business cash (notes, coins, cheques, etc.) – for example, the owner paying in additional capital in the form of cash.	
Payments	Cash receipt or voucher	Used as evidence of payment of cash (notes, coins). The receipt can be in printed form as dispensed by a cash register or might occasionally be a handwritten document. Cash receipts are evidence of cash payment of expenses, for example.	Credit the cash account

Bank transactions			
	Source document	Explanation	Entry required
Receipts	Paying-in slip counterfoils	Used as evidence that money (notes, coins, cheques) has been paid into the business's bank account.	Debit the bank account
	Bank statement	Funds can be transferred directly from a customer's account to the business's bank account using electronic facilities provided by banks. This process is often seen as convenient because it means that cheques do not have to be written and sent through the post. The business is normally aware that funds are being transferred from a customer when the latter sends a remittance advice to the business. Sometimes, however, the business is only aware of funds being received from a customer when the item appears on its bank statement.	
Payments	Cheque counterfoils	Payment by cheque is becoming less common, but for many it is still a useful way of paying payables and expenses. The cheque itself is not available as a source document, because it has been handed over in the process of payment. The cheque stub or counterfoil should be used to record the main details about the payment.	Credit the bank account
	Bank statement	Used to provide evidence of charges made by the bank for providing current account facilities and for interest on any overdraft. Some businesses also use their bank statements as evidence (and reminders) of payments they have authorised using standing orders and direct debits (see Unit 7.3).	

The cash book

Key term

Cash book: a book of original entry in which all cash and bank transactions are recorded.

The book of original entry used to record all money transactions is called the **cash book**. Like all the books of original entry (purchases, sales and returns books, etc.), the cash book is a listing in date order of relevant transactions with information taken from the source documents.

There are several different forms of the cash book. The simplest version takes the cash and bank accounts from the general ledger and puts them side by side to form what is called a two-column cash book.

Illustration 12

Two-column cash book

On 1 September 2018, a business had cash in hand of $740 and cash at bank of $7 280.

The following source documents are available.

Date		Source document	Transaction
Sept	5	Cheque counterfoil	Payment of an account payable, G Lee, $1 420
	8	Till roll	Cash sales totalling $1 580
	11	Cash receipt	Payment of general expenses of $110 in cash
	14	Paying-in slip counterfoil	Transfer of $1 400 cash to the bank account
	21	Bank statement	Bank charges for the month totalling $180
	28	Paying-in slip counterfoil	Cheque from an account receivable, T Evans, $3 170

Here is the two-column cash book for September. It has been balanced at the end of the month and folio references have been added to show that the entries have been posted to the relevant ledger accounts.

Dr **CASH BOOK** **Page 7** **Cr**

				Cash $	Bank $					Cash $	Bank $
Sept	1	Balances		740	7280	Sept	5	G Lee	PL4		1420
	8	Sales	GL9	1580			11	General expenses	GL6	110	
	14	Cash	C		1400		14	Bank	C	1400	
	28	T Evans	SL8		3170		21	Bank charges	GL3		180
							30	Balances	c/d	810	10250
				2320	11850					2320	11850
Oct	1	Balances	b/d	810	10250						

Notes:

- The cash column is always before the bank column.
- The cash book has a 'double role': it is a book of original entry (the first record of money transactions with information extracted from source documents) and it is also part of the double-entry system because it replaces the separate cash and bank accounts that would otherwise have been found in the general ledger.
- The folio references follow the pattern used in previous units. The cash book has a page number and the reference CB7 would be used by the posted entries in the ledgers.
- The folio reference 'C' is used for entries between the cash and bank accounts (that is, paying money into the bank account – as in the example – or taking cash from the bank). C stands for **contra entry**.
- The usual rules for balancing accounts can be applied to the cash book. You will notice that the abbreviations c/d and b/d are written in the folio column.

Practice questions

19. Preparing a two-column cash book

On 1 March 2018, Lorraine's business had cash in hand of $1340 and a balance at the bank of $6270. The following source documents are available for money transactions during March 2018.

Date		Source document	Transaction
March	4	Cash receipt	Purchase of stationery for office use, $60
	7	Cheque counterfoil	Payment of water rates, $290
	11	Till roll	Cash sales totalling $3180
	15	Paying-in slip counterfoil	Transfer of $3000 cash to the bank account

Key term

Contra entry: describes the transfer of cash to the bank, or the withdrawal of cash from the bank for office use. These transactions result in both the debit entry and credit entry for the transaction being recorded in the cash book columns.

Date		Source document	Transaction
	21	Paying-in slip counterfoil	Cheque received from an account receivable, T Ram, $2 240
	23	Cheque counterfoil	Payment of an account payable, D Thomas, $2 350
	27	Bank statement	Bank charges for the month totalled $130

Prepare the business's two-column cash book for March 2018. Balance the cash book on 31 March 2018. Enter appropriate folio references in the cash book as if entries had been posted. Ledger accounts are not required.

20. Preparing a two-column cash book

On 1 August 2018 Owen's business had cash in hand of $370 and a balance at the bank of $4 120. The following source documents are available for money transactions during August 2018.

Date		Source document	Transaction
Aug	3	Till roll	Cash sales totalling $4 820
	7	Paying-in slip counterfoil	Transfer of cash $4 600 to the bank account
	11	Cheque counterfoil	Payment of general expenses $490
	16	Bank statement	Bank charges of $110
	20	Paying-in slip counterfoil	Cheque received from an account receivable, T Lall, $1 470
	27	Cheque counterfoil	Payment of an account payable, TX Supplies Ltd, $880
	30	Cash receipt	Payment of vehicle running costs, $150

Prepare the business's two-column cash book for August 2018. Balance the cash book on 31 August 2018. Enter appropriate folio references in the cash book as if entries had been posted. Ledger accounts are not required.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Cash discounts

Key term

Cash discount: a reduction in the amount paid by credit customers, or to credit suppliers, when accounts are settled within an agreed time limit.

Businesses depend on their cash resources to run the business effectively and so it is important that amounts due from accounts receivables are received as soon as possible. To encourage accounts receivables to pay promptly, some businesses offer their credit customers a **cash discount**.

Illustration 13

Recording discount allowed

Tricia sells goods on credit to Chadee Brothers. Each invoice sent to this customer has a footnote stating 'Terms: 5%, 30 days'. This means that the customer can reduce the amount paid by 5% if payment is made within 30 days. Cash discounts are often in the range 2% to 5%.

On 1 May 2018, Tricia sold goods valued at $1 200 to Chadee Brothers. On 19 May 2018, the amount due was settled less the cash discount.

Step 1: Enter the sale on credit in the sales book in the usual way and then post to the customer's account in the sales ledger.

SALES LEDGER

Dr					Chadee Brothers (Account No. 6)				Cr
				$					$
May	1	Sales	SB9	1 200					

Step 2: When the customer pays on 19 May, the amount paid will be $1 200 less the 5% cash discount: $1 140. Record the receipt of the cheque in the usual way in the cash book with a debit entry in the bank account and a credit entry in the credit customer's account.

Dr					Chadee Brothers (Account No. 6)				Cr
				$					$
May	1	Sales	SB9	1 200	May	19	Bank	CB7	1 140

Step 3: It is now necessary to make entries to record the discount that this customer deducted from the amount due. Discounts given to credit customers are called 'discounts allowed'.

Dr					Chadee Brothers (Account No. 6)				Cr
				$					$
May	1	Sales	SB9	1 200	May	19	Bank	CB7	1 140
						19	Discounts allowed		60

GENERAL LEDGER

Dr				Discounts allowed (Account No. 11)			Cr
			$				$
May	19	Chadee Brothers	60				

Cash discounts might be offered to a business by a supplier, since suppliers will also be anxious to be paid as soon as possible.

Illustration 14

Recording discounts received

Tricia's main supplier is BL Trading Ltd. This supplier always offers Tricia a trade discount of 4% if debts are settled within 30 days. On 4 May 2018, Tricia purchased goods, value $2 400, from BL Trading Ltd. On 24 May, Tricia settled the amount due less the 4% cash discount.

The purchase is recorded in the purchases book in the usual way, and the payment is recorded in the cash book.

Notes:

- The credit entry in the customer's account cancels the remaining debt.
- The debit entry in the discounts allowed account records a loss for the business. The loss is tolerated in order to receive the cash due as soon as possible.
- The discounts allowed account is therefore an expense account. At the end of the year the total of discounts allowed will be transferred to the income statement (profit and loss section).

Notes:

- Cash discounts available from suppliers are called "discounts received".
- The double-entry record for discounts received is:
  - debit the payable account
  - credit the discounts received account.
- For Tricia, the discount received is a small gain – she has paid her supplier less than expected.
- The total of a discounts received account is transferred to the profit and loss section of the income statement at the end of the year, where it will increase the profit made by the business.

The entries in the payable's account and the discounts account are shown below.

PURCHASES LEDGER

Dr — BL Trading Ltd (Account No. 2) — Cr

					$						$
May	24	Bank		CB7	2 304	May	4	Purchases		PB6	2 400
	24	Discounts received			96						

GENERAL LEDGER

Dr — Discounts received (Account No. 12) — Cr

				$					$
					May	24	BL Trading Ltd		96

Three-column cash book

An alternative version of the cash book that is often used by businesses has a third column to make a note of any cash discounts arising from payments to credit suppliers or receipts from credit customers. The additional column acts like a book of original entry record of cash discounts.

Illustration 15

The three-column cash book

Robin is the owner of a wholesale business. He offers his credit customers a 2% cash discount for prompt payment of amounts due. Robin's suppliers offer a cash discount of 5% for prompt payment.

On 1 May 2018 Robin's cash book showed the following balances: cash $1 350, bank $7 480.

The following money transactions occurred during May 2018.

Date		Source document	Transaction
May	3	Cheque counterfoil	Payment of an account payable, Campbell Traders. The amount owed was $2 600. This amount was settled less 5% cash discount
	5	Paying-in slip counterfoil	Receipt of cheque from an account receivable, K Scott, who owed $1 600. This amount was settled less 2% cash discount
	9	Till rolls	Cash sales totalling $4 540
	16	Cheque counterfoil	Payment of an account payable, LT Wright. The amount owed was $4 480. This amount was settled less 5% cash discount
	21	Paying-in slip counterfoil	Paid $4 200 cash into the business's bank account
	28	Paying-in slip counterfoil	Receipt of a cheque from an account receivable, D Pitts, who owed $900. This amount was settled less 2% cash discount

Here is the three-column cash book for May. The cash book has been balanced at the end of the month and folio references have been added to show that the entries have been posted to the relevant ledger accounts.

Dr **CASH BOOK** **Page 11** **Cr**

				Discounts allowed	Cash	Bank					Discounts received	Cash	Bank
				$	$	$					$	$	$
May	1	Balances			1350	7480	May	3	Campbell Traders	PL4	130		2470
	5	K Scott	SL8	32		1568		16	LT Wright	PL9	224		4256
	9	Sales	GL7		4540			21	Bank	C		4200	
	21	Cash	C			4200		31	Balances	c/d		1690	7404
	28	D Pitts	SL5	18		882							
			GL7	50	5890	14130				GL8	354	5890	14130
June	1	Balances	b/d		1690	7404							

The discount columns are totalled and the totals posted to the discount accounts in the general ledger.

GENERAL LEDGER

Dr **Discounts allowed (Account No. 7)** **Cr**

				$						$
May	31	Cash book	CB11	50						

Dr **Discounts received (Account No. 8)** **Cr**

				$						$
					May	31	Cash book	CB11		354

Notes:

- An entry in the discounts allowed column is a note that a discount was given to a customer – it is not a debit entry for that discount.
- An entry in the discounts received column is a note that a discount was received from a supplier – it is not a credit entry for that discount.
- Because the discount columns are just lists of discounts allowed and discounts received, the columns are not balanced at the end of the month. Instead, the columns are totalled and the totals used to make one entry per month in the discounts allowed account and discounts received account in the general ledger. These entries for discount totals replace what would otherwise have been individual debit/credit entries every time a discount was allowed or received. So, for example, a single debit entry in the discounts allowed account is the matching entry for a number of credit entries in the receivable accounts.
- The folio reference for the discount entries are written beside the discount column totals.

Tip

It is a common mistake to try to balance the two discounts columns in the cash book. This can happen when it is not understood that the discount columns are only notes of discounts rather than debit or credit entries.

Tip

The idea that part of the information shown in the double-entry system is only a note about something important – as with the discount columns in the cash book – is properly described as memorandum information. The word "memorandum" just means a note of something to be remembered.

Summary: comparison of cash and trade discounts

The two types of discounts are not alike in many ways and, as a result, are treated quite differently in accounting records.

Cash discount	Trade discount
A reward for prompt payment	A reward for buying in bulk
Rather small in percentage terms (2–5%)	Can be large in percentage terms (say 15–33⅓%)
Recorded as part of the double-entry records	No record made of trade discounts in the double-entry records – only the net amount (after the discount is deducted) is shown

Practice questions

21. Preparing a three-column cash book, personal accounts and discount accounts

The following balances were extracted from the books of Apex Universal, a wholesaler, on 1 November 2018:

	$
Cash in hand	2 190
Cash at bank	7 330
Accounts payable:	
TM Davis	1 600
Ryan & Co.	2 300
Accounts receivable:	
Fray Ltd	900
VK Watson	1 650

Accounts payable give a cash discount of 5% if accounts are settled within 30 days.

Apex Universal gives a cash discount of 2% to its credit customers who settle their accounts within 30 days.

During November 2018, the following transactions occurred.

Date		Source document	Transaction
Nov	5	Cheque counterfoil	Payment of amount due to TM Davis on 1 November less 5% cash discount
	8	Paying-in slip counterfoil	Cheque received from Fray Ltd in full settlement of their account on 1 November less 2% cash discount
	14	Till roll	Cash sales totalling $1 420
	17	Paying-in slip counterfoil	Transfer of cash to bank, $1 250
	21	Cheque counterfoil	Payment of amount due to Ryan & Co. on 1 November less 5% cash discount
	24	Paying-in slip counterfoil	Cheque received from VK Watson in full settlement of their account on 1 November less 2% cash discount

a. Prepare the business's three-column cash book for November 2018. Balance the cash book on 30 November 2018 and total the discount columns on this date.
b. Post the totals of the discount columns to the discount accounts in the general ledger.

Enter folio references in the cash book and ledger accounts.

22. Preparing a three-column cash book, personal accounts and discount accounts

The following balances were extracted from the books of the business owned by Sophia on 1 June 2018:

	$
Cash in hand	450
Cash at bank	2720
Accounts payable:	
N Singh	3200
Zamran Stores	1500
Accounts receivable:	
K Gobin	600
QR Pulchan Ltd	2080

Accounts payable give a cash discount of 5% if accounts are settled within 30 days.

Sophia gives a cash discount of 5% to her credit customers who settle their accounts within 30 days.

During June 2018, the following transactions occurred.

Date		Source document	Transaction
June	5	Cheque counterfoil	Payment of amount due to N Singh on 1 June less 5% cash discount
	8	Paying-in slip counterfoil	Cheque received from K Gobin in full settlement of their account on 1 June less 5% cash discount
	14	Till roll	Cash sales totalling $3920
	17	Paying-in slip counterfoil	Transfer of cash to bank $3800
	21	Cheque counterfoil	Payment of amount due to Zamran Stores on 1 June less 5% cash discount
	24	Paying-in slip counterfoil	Cheque received from QR Pulchan Ltd in full settlement of their account on 1 June less 5% cash discount

a. Prepare the business's three-column cash book for June 2018. Balance the cash book on 30 June 2018 and total the discount columns on this date.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

b. Post entries to the individual customer and supplier accounts in the purchases and sales ledgers. Post the totals of the discount columns to the discount accounts in the general ledger.

Enter folio references in the cash book and ledger accounts.

What happens when a bank account becomes overdrawn?

When a business spends more than it has paid into its bank account, then the balance becomes overdrawn. Businesses usually arrange an overdraft facility (in other words, a formal agreement with the bank) to cover this possibility. Banks charge interest on overdrawn balances and also set a limit on the amount by which the business can become overdrawn. From a bookkeeping point of view, no special action is required when a payment causes the bank account to be overdrawn. When the bank account is balanced, however, you will find that the balance brought down is shown as a credit balance (indicating that it is a current liability) rather than a debit balance.

Notes:

- The bank account actually becomes overdrawn on 18 June when the large payment is made for new equipment. (It is from this date that the bank will start charging interest.)
- However, it is only when the account is balanced at the end of the month that the overdraft balance is formally recorded.
- Of course, a cash account could not become overdrawn. It is impossible to have a negative cash balance!

Illustration 16

A bank account that is overdrawn

Here is the bank account of a business which becomes overdrawn during a particular month. For convenience, just the bank columns from the cash book are shown here.

Dr				CASH BOOK (bank columns only)					Cr
				Bank					Bank
				$					$
June	1	Balance		2 400	June	8	Rent		1 400
	8	Cash		3 700		15	Drawings		1 100
	18	Sales		3 400		18	Equipment		8 600
	30	Balance	c/d	2 090		28	Insurance		490
				11 590					11 590
					July	1	Balance	b/d	2 090

Practice questions

23. Preparing a three-column cash book with an overdrawn bank balance

Shivan owns a retail business. On 1 April 2018, his business's cash in hand was $580 and cash at bank was $2 260. During April, the following transactions occurred.

Date		Source document	Transaction
April	4	Cheque counterfoil	Paid account payable, B Elias, in full settlement of their account, $1 800 less 5% cash discount
	7	Till roll	Cash sales totalling $830
	13	Paying-in slip counterfoil	Transferred $750 cash to bank
	14	Paying-in slip counterfoil	Cheque received from account receivable, H Carr, in full settlement of their account, $480 less 2.5% cash discount
	21	Cheque counterfoil	Purchase of new office furniture, $2 950
	22	Cash receipt	Payment of general expenses, $240
	26	Cheque counterfoil	Paid account payable, T Ellis, in full settlement of their account, $2 700 less 5% cash discount
	28	Bank statement	Bank charges for the month totalled $220

Prepare the business's three-column cash book for April 2018. Balance the cash book on 30 April 2018 and total the discount columns. Enter appropriate folio references in the cash book as if entries had been posted. Ledger accounts are not required.

24. Preparing a three-column cash book with an overdrawn bank balance

Deva owns a beachwear business. On 1 May 2018, her business's cash in hand was $1 270 and cash at bank was $1 480. During May, the following transactions occurred.

Date		Source document	Transaction
May	5	Till roll	Cash sales totalling $930
	8	Cheque counterfoil	Paid account payable, Nico Ltd, in full settlement of their account, $2 600 less 5% cash discount
	11	Paying-in slip counterfoil	Transferred $740 cash to bank
	19	Cash receipt	Payment of travelling expenses, $140
	22	Paying-in slip counterfoil	Cheque received from account receivable, Amin Supplies Ltd, in full settlement of their account, $1 200 less 4% cash discount
	24	Cheque counterfoil	Deva withdrew a cheque for $450 for her private use
	30	Cheque counterfoil	Paid account payable, BL Stores, in full settlement of their account, $3 400 less 5% cash discount

Prepare the business's three-column cash book for May 2018. Balance the cash book on 31 May 2018 and total the discount columns. Enter appropriate folio references in the cash book as if entries had been posted. Ledger accounts are not required.

25. Preparing a full accounting system including a three-column cash book up to the trial balance

Kimberly Watson opened a business on 1 September 2018. On that date, her business's assets and liabilities were as follows.

	$
Cash in hand	1380
Cash at bank	1750
Non-current assets	86500
Bank loan	15000

During September the following transactions occurred.

Date		Source document	Transaction
Sept	4	Purchase invoice (2361)	From TM Bennett Ltd for goods, $2800 less 25% trade discount
	6	Cash receipt	Paid general expenses of $180 in cash
	7	Credit note received (G09)	From TM Bennett Ltd for goods not as ordered, $240 less 25% trade discount
	12	Till roll	Cash sales totalling $1090
	14	Cheque counterfoil	Paid TM Bennett Ltd in full settlement of their account at this date less 5% cash discount
	15	Sales invoice (0001)	To KS Maharaj for goods, $2000 less 20% trade discount
	19	Cheque counterfoil	Rent for three months, $2480
	21	Paying-in slip counterfoil	Transfer of $730 cash to bank
	23	Cash receipt	Kimberly withdrew $280 cash for her private use
	26	Credit note issued (01)	To KS Maharaj for damaged items sold on 15 September, $125 less 20% trade discount
	28	Paying-in slip counterfoil	Cheque received from KS Maharaj in full settlement of their account at this date less 2% cash discount
	30	Bank statement	Bank charges for the month totalled $70

Prepare the following books of original entry for September 2018:

a. three-column cash book
b. purchases book
c. sales book
d. returns outwards book
e. returns inwards book
f. Post the entries in the books of original entry to the purchases, sales and general ledgers.
g. The cash book should be balanced at 30 September 2018 and the discount columns totalled and posted to the general ledger. It is unnecessary to balance or close any other accounts. Use suitable folio references throughout.
h. Prepare a trial balance at 30 September 2018.

26. Preparing a full accounting system including a three-column cash book up to the trial balance

MJ Hall Wholesale's trial balance on 1 December 2018 was as follows.

Trial balance at 1 December 2018		
	Dr	Cr
	$	$
Account payable: Carter & Sons		13 400
Account receivable: JM McNee Ltd	8 500	
Bank	1 650	
Bank charges	480	
Capital		613 640
Cash	820	
Discounts allowed	690	
Discounts received		770
Drawings	34 580	
Insurance	8 240	
Non-current assets	725 000	
Purchases	505 300	
Rent	44 680	
Returns inwards	3 130	
Returns outwards		4 290
Salaries	151 400	
Sales		852 370
	1 484 470	1 484 470

During December the following transactions occurred.

Date		Source document	Transaction
Dec	3	Sales invoice (339)	To JM McNee Ltd for goods, $9 600 less 33 ⅓ % trade discount
	4	Cheque counterfoil	Paid insurance, $1 050
	7	Credit note issued (074)	To JM McNee Ltd for goods, $450 less 33 ⅓ % trade discount, returned as unsatisfactory
	9	Purchase invoice (D487)	From Carter & Sons for goods, $8 840 less 25% trade discount
	12	Cheque counterfoil	Paid Carter & Sons in full settlement of their account at 1 December less 5% cash discount
	15	Credit note received (449)	From Carter & Sons for goods, $620 less 25% trade discount, damaged in transit
	17	Cheque counterfoil	Rent, $3 850
	18	Till roll	Cash sales totalling $13 250
	19	Paying-in slip counterfoil	Transfer of $13 800 cash to bank
	23	Cheque counterfoil	Paid salaries, $11 620

	27	Cheque counterfoil	MJ Hall withdrew a cheque for $800 for private use
	29	Paying-in slip counterfoil	Cheque received from JM McNee Ltd in full settlement of their account at this date less 5% cash discount
	30	Bank statement	Bank charges for the month, $240

Prepare the following books of original entry for December 2018:

a. three-column cash book
b. purchases book
c. sales book
d. returns outwards book
e. returns inwards book.
f. Post the entries in the books of original entry to the purchases, sales and general ledgers.
g. The cash book should be balanced at 31 December 2018 and the discount columns totalled and posted to the general ledger. It is unnecessary to balance or close any other accounts. Use suitable folio references throughout.
h. Prepare a trial balance at 31 December 2018.

27. Preparing end-of-year financial statements including discounts

On 31 March 2018, the following trial balance was extracted from the books of Kevin Morris Supplies.

Trial balance at 31 March 2018		
	Dr	Cr
	$	$
Accounts payable		14730
Accounts receivable	8360	
Bank overdraft		5870
Capital		109320
Cash	440	
Discounts allowed	1220	
Discounts received		1590
Drawings	22480	
Equipment and furniture	185000	
Office expenses	31480	
Purchases	212400	
Rent	18500	
Returns inwards	840	
Returns outwards		1120
Sales		386990
Wages and salaries	38900	
	519620	519620

Prepare the following:

a. income statement (trading and profit and loss account) for the year ended 31 March 2018
b. statement of financial position (balance sheet) at 31 March 2018 (classified).

28. Preparing end-of-year financial statements including discounts

On 30 September 2018, the following trial balance was extracted from the books of Pinebeach Books, owned by Rhonda Williams.

Trial balance at 30 September 2018		
	Dr	Cr
	$	$
Accounts payable		6 280
Accounts receivable	920	
Administration expenses	5 530	
Bank overdraft		720
Capital		374 140
Cash	320	
Discounts allowed	190	
Discounts received		510
Drawings	28 800	
Furniture and fittings	15 500	
Insurance	3 260	
Premises	390 000	
Purchases	98 360	
Returns inwards	430	
Returns outwards		970
Sales		205 350
Wages	44 660	
	587 970	587 970

Prepare the following:

a. income statement (trading account and statement of profit and loss) for the year ended 30 September 2018
b. statement of financial position (balance sheet) at 30 September 2018 (classified).

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

3.4 The petty cash book

Objectives

By the end of this unit you will be able to:

- identify the source documents used when recording petty cash transactions
- prepare a petty cash book with analysis columns using the imprest system
- post the details recorded in the petty cash book to general ledger and purchases ledger accounts, including the use of folio references.

Key terms

Petty cash: small cash payments.

Petty cash book: a book of original entry used for recording small cash payments with information taken from petty cash vouchers. The petty cashier often has a float (called an imprest) to use for these payments.

Imprest: a system for maintaining a petty cash book that gives the petty cashier responsibility for a petty cash float.

Petty cash voucher: the source document for each petty cash payment.

What is petty cash and how is it documented?

In businesses where there are a large number of transactions in cash, the decision is sometimes made to operate a second cash book that is used exclusively to record relatively minor cash transactions – otherwise known as **petty cash** transactions.

Often the task of preparing the **petty cash book** is given to a more junior member of the accounts team, who is sometimes called the petty cashier. Responsibility for handling the business's cash is usually tightly controlled:

- The petty cashier is only allowed to handle a limited amount of petty cash at any one time. This maximum amount is sometimes called the float or **imprest**. The size of the float or imprest is decided by the owner or manager of the business.
- The petty cashier is only allowed to give cash to employees to reimburse them for payments they have made on behalf of the business if they can produce formal evidence, usually in the form of a receipt.
- For each payment made, the petty cashier is required to complete a **petty cash voucher**. The voucher has to be signed by the person receiving cash as well as by the petty cashier. Other evidence of the transaction (for example, the receipt) is attached to the voucher.
- For security, petty cash is usually kept under lock and key.

Illustration 17

A petty cash voucher

Number **302**

PETTY CASH VOUCHER

Item	*Amount* $
Interviewee's travel expenses	33.74

Authorised by Lewis Pitts

Received by Irene Johnson

Notes:

- An interviewee, Irene Johnson, has been given $33.74 for travel expenses for attending an interview.
- Irene Johnson has signed the petty cash voucher to confirm that she received the amount stated.
- The petty cashier, Lewis Pitts, has signed the petty cash voucher to indicate that he was responsible for making this payment.
- Lewis will probably attach a receipt for the travelling expenses to the voucher (for example, a receipt for a taxi, or a bus or train ticket).
- The voucher has a number: 302. This number will be used in preparing the accounting records. There will be a pad of petty cash vouchers and they will be numbered in consecutive order.

How are petty cash transactions recorded?

An illustration of a completed petty cash book is shown in Illustration 18. The steps to be followed in completing a petty cash book are summarised as follows:

Step 1: *Receiving the float.* The petty cashier receives the float/imprest in the form of cash or perhaps a cheque that needs to be cashed. The double-entry record required is:

- debit the petty cash account
- credit the cash or bank column in the main cash book.

Step 2: *Recording a petty cash payment.* Using information shown on each petty cash voucher, the petty cashier makes the following record in the petty cash book:

- credit the petty cash account
- make a second entry in the appropriate **analysis column**.

(See Step 4 below for the corresponding debit entry.)

Step 3: *Balancing the petty cash book.* The petty cash account is balanced in the usual way and the balance brought down to start the next period. At this point, the petty cashier needs more cash to cover the next period's petty cash payments. The petty cashier is reimbursed for the last period's payments and debits the petty cash account with

Key term

Analysis columns: (in a petty cash book) a means of classifying each payment to provide totals to be posted to general ledger accounts.

the amount received. By receiving back exactly what was spent in the previous period, the float/imprest is restored.

Step 4: *Totalling and posting the analysis columns.* Finally, the analysis columns are totalled and each total is posted to the relevant ledger accounts. Usually these postings are to expense accounts, but in some cases it is possible that an account payable is paid in petty cash because only a very small amount is due.

Illustration 18

An analysed petty cash book

The owner of a business decided to maintain a petty cash book with an imprest of $150. The following transactions occurred.

Date		Voucher number	Transaction
May	1		Petty cashier received a cheque for $150
	2	1	Stationery, $32.62
	8	2	Postage, $26.29
	11	3	Travel expenses, $18.40
	15	4	Postage, $11.83
	20	5	Purchase ledger account of D Morris, $20.70
	23	6	Stationery, $11.37
	27	7	Travel expenses, $19.11
	31		Imprest restored with the receipt of a cheque

Here is the petty cash book for May 2018.

PETTY CASH BOOK							Page 1		
Receipts $	Date	Details	Folio/ voucher	Payments $	Stationery $	Postage $	Travel $	Purchase ledger $	Folio
150.00	May 1	Cheque	CB6						
	2	Stationery	1	32.62	32.62				
	8	Postage	2	26.29		26.29			
	11	Travel	3	18.40			18.40		
	15	Postage	4	11.83		11.83			
	20	D Morris	5	20.70				20.70	PL4
	23	Stationery	6	11.37	11.37				
	27	Travel	7	19.11			19.11		
				140.32	43.99	38.12	37.51	20.70	
	31	Balance	c/d	9.68	GL6	GL8	GL9		
150.00				150.00					
9.68	June 1	Balance	b/d						
140.32	1	Cheque	CB7						

Notes:

- The cheques received by the petty cashier on 1 May and 1 June would be cashed to provide notes and coins to make petty cash payments.
- The matching entry in the cash book for 1 May would appear as follows.

Dr			CASH BOOK				Page 6	Cr
		Cash $	Bank $				Cash $	Bank $
				May	1	Petty cash	PCB1	150

- In the petty cash book, the receipts column is the equivalent of the debit side of the petty cash account; the payments column is the equivalent of the credit side.
- Each payment must be cross-referenced to the relevant voucher.
- Each payment is analysed under appropriate headings. These would be decided in advance by the owner or manager of the business. There can be as many analysis columns as are required.
- The balancing process is almost exactly the same as normal but notice that the payments column is first subtotalled before balancing.
- The analysis columns are totalled at agreed intervals, and the totals posted to the relevant ledger accounts. This process saves time as otherwise separate entries would have to be made in the ledger accounts of every petty cash payment, however small the amount involved.
- Folio references for the postings are recorded as shown. Notice that in the case of the payment to an account payable, a folio reference is placed beside the actual payment – the analysis column total for payments to accounts payables is not of any use for posting.
- The owner of a business can decide to use a petty cash book and not have any cash columns in the main cash book. In this situation, the main cash book will only have columns for discounts and bank.

What should I do with the balance of the petty cash book?

The balance of the petty cash book is one of the business's assets. Like any cash balance it should be recorded as an asset in the trial balance and as the most liquid of the business's current assets on the statement of financial position (balance sheet).

Tip

To help avoid arithmetical errors with the balancing process and totalling of analysis columns, it is a good idea to cross check that the subtotal for payments agrees with the total of the analysis columns.

Practice questions

29. Preparing a petty cash book and posting to ledger accounts

Jenny has decided that her business should make use of a petty cash book and that the imprest should be $200. She has also

decided that the petty cash book should have the following analysis columns:

- postage
- stationery
- travel
- cleaning
- general expenses
- purchase ledger accounts.

During the first month of operation – October 2018 – the following petty cash transactions occurred.

Date		Voucher number	Transaction
Oct	1		Petty cashier received a cheque for $200
	3	1	Postage, $24.52
	5	2	Office cleaning, $35.00
	8	3	Travel expenses, $11.80
	12	4	Account payable, D Chadee, $14.48
	16	5	General expenses, $10.60
	17	6	Office cleaning, $35.00
	20	7	Travel expenses, $7.38
	22	8	Stationery, $14.23
	24	9	Cleaning materials, $12.22
	30	10	Account payable, M Carr, $21.37
	31		Petty cash book balanced and analysis columns totalled
Nov	1		Imprest restored with the receipt of a cheque

a. Prepare the petty cash book for October 2018.
b. Post the details of the analysis columns to the accounts in the general and purchases ledgers.
c. Restore the imprest on 1 November.

Tip

When you see the item "petty cash (in hand)" in a trial balance remember this is a reference to the petty cash balance. This item should be recorded as a current asset in the statement of financial position (balance sheet). It is a common mistake to think that this item is a reference to petty cash expenses and record the amount in the profit and loss account by mistake.

30. Preparing a petty cash book and posting to ledger accounts

Jamal's business makes use of a petty cash book. On 1 February 2018, the balance of petty cash in hand was $14.55. The petty cash book operates with an imprest of $220 and with the following analysis columns:

- postage
- stationery
- vehicle expenses
- casual labour
- office expenses
- purchase ledger accounts.

During February 2018 the following petty cash transactions occurred.

Date		Voucher number	Transaction
Feb	1		Petty cashier received a cheque to restore the imprest
	2	141	Stationery, $9.70
	8	142	Vehicle fuel, $35.50
	10	143	Postage, $11.10
	13	144	Casual labour, $38.25
	15	145	Office expenses, $8.42
	18	146	Account payable, Ryan & Co. Ltd, $17.11
	21	147	Vehicle fuel, $34.22
	23	148	Account payable, BY Scott, $9.28
	25	149	Postage, $8.56
	26	150	Casual labour, $21.80
	28		Petty cash book balanced and analysis columns totalled
March	1		Imprest restored with the receipt of a cheque

a. Prepare the petty cash book for February 2018.
b. Post the details of the analysis columns to the accounts in the general and purchases ledger.
c. Restore the imprest on 1 March.

31. Preparing cash books

Laurelle owns a small department store. Her accounting system includes the following:

- Petty cash book: operates with a monthly imprest of $200. Petty cash is used to make all payments below $40. The petty cash book has the following analysis columns:
  - vehicle expenses
  - postage
  - office expenses
  - cleaning.
- Two-column cash book: with columns for bank and discounts. All payments above $40 are made by cheque.

The following information is available for June 2018:

June 1 Petty cash in hand, $19; cash at bank, $3880
2 Petty cashier received cheque to restore the imprest
3 Banked cash sales of $832
7 Paid office expenses, $8.82

8 Paid for vehicle fuel, $32.30
10 Received a cheque from account receivable, Y Khan, in full settlement of the amount due, $640 less 2.5% cash discount
11 Paid for office expenses, $11.28
15 Paid cleaner's wages, $37.32
16 Paid account payable, A Mohammed, in full settlement of the amount due, $1 400 less 5% cash discount
18 Purchased postage stamps, $14
21 Paid for office expenses, $7.11
22 Received a cheque from account receivable, B Taylor, in full settlement of the amount due, $880 less a 2.5% cash discount
23 Banked cash sales of $902
24 Paid for vehicle fuel, $25
25 Paid account payable, J Ram, in full settlement of the amount due, $1 860 less 5% cash discount
26 Paid office expenses, $45
27 Purchased postage stamps, $17.14
28 Paid cleaner's wages, $31.26
29 Paid for vehicle fuel, $48
30 Paid wages, $1 580
30 Balanced petty cash book and cash book. Totalled analysis columns and discount columns

Prepare the business's petty cash book and cash book for the month of June 2018. Invent suitable voucher numbers for petty cash transactions and use your own folio references in both cash books. Entries do not have to be posted to ledger accounts.

32. Preparing cash books

Kerron owns a wholesale business providing building materials. His business makes use of two cash books:

- Petty cash book: operates with a monthly imprest of $300. Petty cash is used to make all payments below $60. The petty cash book has the following analysis columns:
  - stationery
  - travel expenses
  - vehicle running expenses
  - general expenses.
- Two-column cash book: with columns for bank and discounts. All payments above $60 are made by cheque.

The following information is available for March 2018:

March 1 Petty cash in hand, $34; cash at bank, $1 724
2 Petty cashier received cheque to restore the imprest
4 Paid for general expenses, $18.49
6 Received cheque from account receivable, Dass & Co, in full settlement of their account, $2 360 less 5% cash discount
7 Banked cash sales of $1 460
9 Paid employee's travel expenses, $37.33
10 Paid account payable, P Nanan Ltd, in full settlement of the amount due, $4 580 less a 5% cash discount
11 Purchased stationery, $14.37
12 Paid for vehicle fuel, $45.60
14 Paid rent, $780
15 Purchased stationery, $25.31
17 Paid for vehicle repairs, $56
18 Paid employee's travel expenses, $18.42
20 Paid wages, $2 480
21 Received a cheque from account receivable, MV Tammy, in full settlement of the amount due, $3 300 less 5% cash discount
23 Banked cash sales of $782
24 Paid for vehicle repairs, $83
25 Paid employee's travel expenses, $24.89
27 Paid for vehicle fuel, $41.45
28 Paid for general expenses, $64
31 Balanced petty cash book and cash book. Totalled analysis columns and discount columns

Prepare the business's petty cash book and cash book for the month of March 2018. Invent suitable voucher numbers for petty cash transactions and use your own folio references in both cash books. Entries do not have to be posted to ledger accounts.

33. Preparing end-of-year financial statements including a petty cash balance

Kris Watson owns a shoe shop. His business's financial year ended on 31 October 2018 when the following trial balance was extracted from the business's books of account.

Trial balance at 31 October 2018		
	Dr	Cr
	$	$
Accounts payable		5523
Accounts receivable	2804	
Bank charges	387	
Bank overdraft		1028
Capital		26346
Cleaning expenses	114	
Discounts allowed	559	
Discounts received		782
Drawings	30385	
Furniture and fittings	27500	
Insurance	2194	
Office expenses	1183	
Petty cash	32	
Purchases	118548	
Rent	18340	
Returns inwards	258	
Returns outwards		803
Sales		199281
Travel expenses	173	
Wages	31286	
	233763	233763

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Prepare the following:

a. income statement (trading account and profit and loss account) for the year ended 31 October 2018

b. statement of financial position (balance sheet) at 31 October 2018 (classified).

3.5 The general journal

Objectives

By the end of this unit you will be able to:

- identify situations when it is appropriate to use the general journal
- prepare a general journal
- post the details recorded in the general journal to ledger accounts including the use of folio references.

What is the general journal?

The double-entry accounting system works on the basis that all transactions should first be recorded in a book of original entry before entries are made in ledger accounts. So far, books of original entry have been put in place for:

- money transactions: two cash books
- credit transactions (for goods in which the business trades): purchases, sales and returns books.

At first sight, this arrangement might seem to cover every possibility. However, there is a small group of entries in the accounting system that fall outside these categories. In order to provide the first record for these entries, the **general journal** is used.

The general rule for the use of the general journal is that it should be used whenever the cash books or purchases, sales and returns books are inappropriate. The following broad categories give some idea of when these situations occur:

- the purchase of non-current assets on credit
- cancelling entries and correcting errors in accounts
- transferring information from one account to another
- opening a new set of books.

Key term

General journal: a book of original entry used to make the first record of transactions that it would not be appropriate to record in the other books of original entry (cash books and purchases, sales and returns books).

Tip

The general journal is sometimes referred to by these alternative titles:

- journal
- journal proper.

Preparing journal entries

A journal entry is a written record of an instruction to those who keep ledger accounts of the entries that are to be made for particular situations. In other words, a journal entry is an instruction as to which account should be debited and which account should be credited.

Tip

There is a considerable range of possible source documents for journal entries. As well as the familiar invoice (for the purchase of a non-current asset), there could be letters or emails received from other businesses or organizations, and internal notes or emails written by the owner, managers or other employees.

Illustration 19

Purchase of a non-current asset on credit

On 4 July 2018, the owner of a business purchased a new vehicle, value $32 000, for business use, on credit from Blue River Motors Ltd.

The journal entry is shown below.

Journal			Page 5	
Date	Details	Folio	Dr	Cr
			$	$
July 4	Vehicles	GL4	32 000	
	Blue River Motors Ltd	PL7		32 000
	Purchase of new vehicle on credit, invoice number 4872			

Notes:

- A journal entry requires the following details:
  - date of the transaction
  - account to be debited and the amount
  - account to be credited and the amount
  - a short explanation of the nature of the transaction – the narrative
  - folio references that are recorded as the information is posted to the ledger accounts.
- It is usual to slightly indent the name of the account to be credited in the details column.
- Each journal entry is separated from the next one by ruling off the details column.

The journal entry is then posted to the relevant ledger accounts:

GENERAL LEDGER

Dr	Vehicles (Account No. 4)			Cr			
			$				$
July 4	Blue River Motors Ltd	J5	32 000				

PURCHASES LEDGER

Dr	Blue River Motors Ltd (Account No. 7)			Cr			
			$				$
				July 4	Vehicle	J5	32 000

Illustration 20

Cancelling entries

Here is a further example of a situation when a journal entry would be required.

The owner of a business recently paid an account payable, I Watson, and deducted a cash discount of $40. However, on 12 October 2018 I Watson emailed to say that the discount should not have been deducted because payment was made after the 30-day limit.

The journal entry is as follows.

Journal			Page 6	
Date	Details	Folio	Dr	Cr
			$	$
Oct 12	Discount received	GL9	40	
	I Watson	PL7		40
	Cancellation of discount deducted in error			

The ledger account entries are as follows.

GENERAL LEDGER

Dr	Discount received (Account No. 9)				Cr	
				$		$
Oct 12	I Watson		J6	40		

PURCHASES LEDGER

Dr	I Watson (Account No. 7)				Cr	
				$		$
					Oct 12 Discount received	J6 40

Illustration 21

Correcting errors

It is inevitable that errors will be made in the accounts from time to time. The rule is always that errors should be corrected by making additional entries, not by crossing out or trying to remove the wrong entries.

On 5 August 2018, a business's bookkeeper recorded the payment of rent by cheque, $345, as $354 in both the bank account and rent account.

Link

There is more on the correction of errors in Chapter 7.

The journal entry to record the correction of these entries is:

Journal			Page 3	
Date	Details	Folio	Dr	Cr
			$	$
Aug 5	Bank	CB5	9	
	Rent	GL4		9
	Correction of error in recording the amount paid for rent			

Here are the entries in the bank account and in the rent account, showing the original entries and the posting of the corrections.

Dr	CASH BOOK (bank columns)					Page 5	Cr				
					Bank						Bank
					$						$
Aug	5	Rent	J3		9	Aug	5	Rent	GL4		354

GENERAL LEDGER

Dr	Rent (Account No. 4)					Cr					
					$						$
Aug	5	Bank	CB5		354	Aug	5	Bank	J3		9

Illustration 22

Transferring information from one account to another

At the end of each accounting period many accounts are closed and their balances transferred to the end-of-year financial statements. These transfers from one account to another should all be journalised first.

On 31 December 2018, the end-of-year financial statements of the business owned by Laura Cousins were prepared. This included the transfer of sales, $193 400, to the trading account section of the income statement; and the transfer of the wages, $32 480, to the profit and loss account section of the income statement.

These transfer entries should be journalised as follows.

Journal			Page 8	
Date	Details	Folio	Dr	Cr
			$	$
Dec 31	Sales	GL14	193 400	
	Trading account	GL15		193 400
	Transfer of sales to income statement			
31	Profit and loss account	GL16	32 480	
	Wages	GL9		32 480
	Transfer of wages to income statement			

Illustration 23

Opening a new set of books

When a new business starts up and the books of account are opened for the first time, a journal entry should be used to record the starting position in the asset, liability and capital accounts. This situation is obviously unusual and occurs just once in the history of any business.

On 1 January 2018, Jo Anderson opened a business with the following.

	$
Bank	55 000
Vehicle	43 000
Bank loan	20 000
Capital	78 000

The journal entry to record the opening of the books of account is as follows.

Journal			Page 1	
Date	Details	Folio	Dr	Cr
			$	$
Jan 1	Bank	CB1	55 000	
	Vehicle	GL1	43 000	
	Bank loan	GL2		20 000
	Capital	GL3		78 000
	Entries to open books of account			

Practice questions

34. Preparing journal entries

Prepare journal entries to record the following transactions:

July 3 A company purchased new equipment, $3 600, for business use on credit from J Rajah Ltd (invoice number 7361).

10 A customer, Gobin Ltd, had claimed a cash discount of $380 when settling their account and this had been recorded in the accounting records. However, it was then decided that the customer was not entitled to the discount and the entries were cancelled.

14 It was noticed that the bookkeeper had made a mistake when recording the sale of goods, value $780, on credit to TM Williams. The correct entry had been made in the

sales account, but the account of T Williams Ltd had been debited in error. Entries were made to correct this mistake.

19 Some of the equipment purchased from J Rajah Ltd on 3 July was returned to the supplier as it was damaged in transit. The supplier sent a letter agreeing to the deduction of $520 from the amount due.

31 At the end of the business's accounting year, total purchases of $156 000 were transferred to the trading account section of the income statement.

31 The balance of the discounts received account, $943, was transferred to the profit and loss account section of the income statement.

Show how all the journal entries would be posted to ledger accounts.

35. Preparing journal entries

a. Prepare journal entries to record the following transactions:

May 1 The owner of a business opened the books of account with the following: bank $5 000, fixtures and fittings $23 000, bank loan $8 000 and capital $20 000.

12 An error was made when the purchase of stationery $105 was posted to the debit side of the purchases account rather than the debit side of the administration expenses account. This mistake was corrected.

15 Some fixtures, value $1 050, were purchased for business use on credit from Falmouth Shelving Ltd (invoice number 3088).

30 A cash discount of $100 had been deducted when settling the account of an account payable, TX Singh Ltd. However, the supplier wrote to say that this discount should be cancelled as the payment had been made after the specified time limit. Entries were made to cancel the discount.

31 Monthly financial statements were prepared and the total of the sales account, $28 700, was transferred to the trading account section of the income statement.

31 The balance of the rent account, $750, was transferred to the profit and loss account section of the income statement.

b. Show how all the journal entries would be posted to ledger accounts.

36. Selecting the correct books of original entry

During the month of February 2018, the following transactions occurred affecting the accounts of Rishi, a trader. Rishi maintains all seven books of original entry as part of his books of account. In the case of each transaction, decide which books of original entry should be used to make the first entry in the accounting system:

Feb	4	Received an invoice for goods for resale
	7	Paid an account payable by cheque
	11	A voucher showed the payment of travel expenses in cash
	15	Received a credit note from an account payable for goods damaged in transit
	17	Cancelled the entries for a cash discount that had been incorrectly deducted by a customer when settling their account
	18	A cheque was drawn for the payment of wages
	22	Received an invoice for a new vehicle for business use
	24	Issued a credit note to an account receivable for goods returned as unsuitable
	28	Corrected a mistake in the accounts where the wrong amount had been debited and credited in the ledger accounts

37. Selecting the correct books of original entry

Renea is the owner of a retail unit. Her business's accounting system includes all seven books of original entry as part of her books of account. The following transactions were among those that occurred during September 2018. In each case, decide which books of original entry should be used to make the first record of the transaction.

Sept	3	Received an invoice for some new equipment for business use
	6	Cheque stub showed the payment of rent for the month
	11	Entries made to correct a mistake made by the bookkeeper
	14	Invoice issued for the sale of goods on credit
	15	Credit note issued for the return of goods by a customer
	20	A voucher showed the purchase of postage stamps
	23	Invoice received for goods for resale
	25	Some of the new equipment was found to be faulty and was returned to the supplier
	30	Expense accounts were closed and their balances transferred to the profit and loss section of the income statement for the year ended on this date

38. Preparing a full accounting system including journal entries up to the trial balance

On 1 January 2018, Annika opened a new business with the following.

	$
Cash at bank	3500
Vehicle	36000
Equipment	19000
Capital	58500

Annika has decided to maintain the following books of original entry:

- general journal
- three-column cash book
- purchases book
- sales book
- returns outwards book
- returns inwards book.

During January the following transactions occurred:

Jan	4	Received an invoice (number 302) from MJT Ltd for goods for resale, $6400 less 25% trade discount
	7	Till rolls showed cash sales totalling $1240
	10	Paid operating expenses of $280 in cash
	11	Banked $800 cash
	14	Received a credit note (number 073) from MJT Ltd for goods returned as damaged, $200 less 25% trade discount
	15	Received an invoice (number 478) for some additional equipment for business use from Bridge Products, $880
	16	Issued an invoice (number 001) to Geeta Stores for goods, $1200 less 15% trade discount
	19	Returned some of the additional equipment purchased on 15 January from Bridge Products, $90
	22	Issued a credit note (number 001) to Geeta Stores for goods, $100 less 15% trade discount
	24	Paid MJT Ltd in settlement of their account at this date less 2% cash discount
	29	Received a cheque from Geeta Stores in full settlement of their account at this date less a cash discount of $24

a. Record these transactions in the books of original entry and post to the ledger accounts.

b. Balance the cash book and total the discount columns. Invent suitable folio references.

c. Prepare a trial balance at 31 January 2018. There is no need to balance or close any other accounts.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

3.6 Preparing source documents

Objectives

By the end of this unit you will be able to:

- prepare source documents
- translate source documents into transaction descriptions.

Preparing source documents

Source documents provide much detailed information to enable businesses to conduct their affairs efficiently.

For example, an invoice will include the following information:

- name and address of supplier
- name and address of customer
- date of transaction
- invoice number
- terms of payment
- details of each type of product being supplied: quantity, description, unit price, total price
- total amount due.

INVOICE No.

Name of Company

Address of company

To:
Recipient Name
Company Name
Address

Date:

Quantity	*Description*	*Unit price*	*Total*

TOTAL DUE

Terms:

Illustration 24

Completing an invoice

Joel Bolt is the owner of Fastrack Wholesale of Beach Road, Mustique. He prepared an invoice on 11 August 2018 to be sent to Asafa's Stores Ltd of Main Street, Portford, St Vincent. The goods being supplied were:

Items	Price per item
20 sunbeds type A1	$55
15 Supa surfboards	$590
12 standard surfboards	$420

Joel offers this customer a trade discount of 20%. Invoices should be paid within 30 days. The invoice number is S3702.

The completed sales invoice is as follows.

INVOICE No. S3702

Fastrack Wholesale
Beach Road Mustique

To:
Asafa's Stores Ltd
Main Street, Portford
St Vincent

Date: 11 August 2018

Quantity	*Description*	*Unit price*	*Total*
20	Sunbeds type A1	$55	$1 100
15	Supa surfboards	$590	$8 850
12	Standard surfboards	$420	$5 040
	Subtotal		$14 990
	Less 20% trade discount		($2 998)
		TOTAL DUE	**$11 992**

Terms: 30 days

Translating a source document into a transaction description

The first task of the accounts clerk is to extract the right information from any source document before making any entries in the books of account.

The following key facts are required when extracting information from a source document:

- date of the source document
- any number or reference which will identify the document
- the name of the supplier or customer where individual accounts will be involved
- the nature of the transaction
- the amount of the transaction

Illustration 25

Translating an invoice into a transaction description

The accounts clerk working for Fastrack Wholesale (see Illustration 24) will extract the following information from the invoice before making an entry in the sales book.

date of the source document	*11 August 2018*
any number or reference which will identify the document	*S3702*
the name of the supplier or customer where individual accounts will be involved	*Customer: Asafa's Stores Ltd*
the nature of the transaction	*Sale on credit*
the amount of the transaction	*$11 992*

In other words, the transaction description is:

Sold goods on credit to Asafa Store's Ltd on 11 August 2018 (invoice S3702), $11 992

Illustration 26

Translating a petty cash voucher into a transaction description

An accounts clerk has received the following source document from the business's petty cashier.

Number **714** Date: 14 March 2018

PETTY CASH VOUCHER

Item	*Amount* $
Photocopier paper (3 packs at $4.60 each)	13.80

Authorised by: Lesia Vincent

Received by: Laurelle Watson

The accounts clerk will extract the following information from this source document before making an entry in the petty cash book.

date of the source document	*14 March 2018*
any number or reference which will identify the document	*Petty cash voucher number 714*
the nature of the transaction	*Stationery expenses*
the amount of the transaction	*$13.80*

Practice questions

39. Preparing an invoice

Complete an invoice from the following information. (Use a document similar to the one illustrated here.)

INVOICE No.100

Name of Company

Address of company

To:
Recipient Name
Company Name
Address

Date:

Quantity	*Description*	*Unit price*	*Total*
		TOTAL DUE	

Terms:

Anthony Stephens is the owner of Quality Furniture Wholesalers of Ford Street, Scarborough, Tobago. On 8 July 2018 he prepared an invoice to be sent to PQD Ltd of Waterloo Road, San Fernando, Trinidad.

The goods being supplied were:

Items	Price per item
30 futons	$320
12 computer desks	$420
5 oak table sets	$2040

Joel offers this customer a trade discount of 25%. Invoices should be paid within 30 days. The invoice number is X8283.

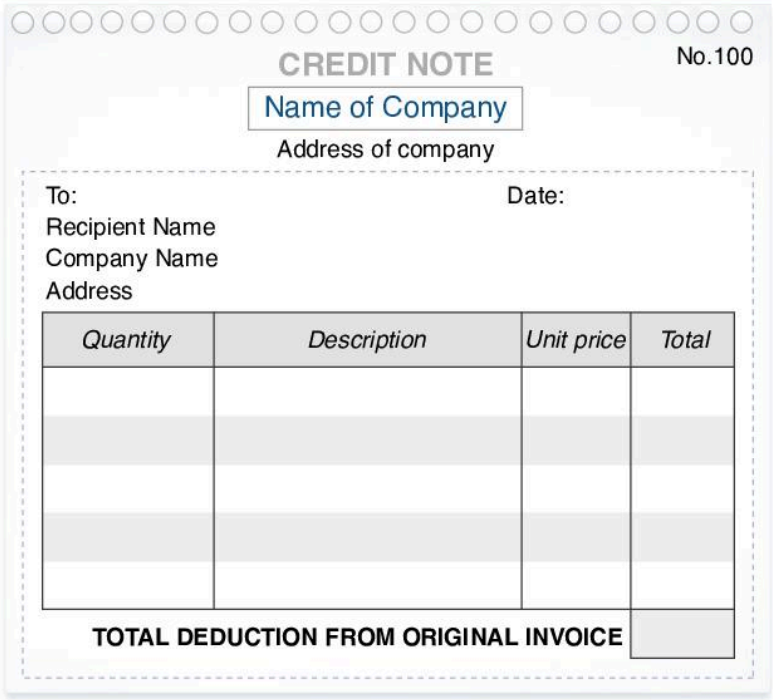
40. Preparing a credit note

On 25 July 2018 PQD Ltd returned goods supplied by Quality Furniture Wholesalers. (For full details see Question 39.)

The goods returned are:

Items	Price per item	Reason
5 futons	$320	Not as ordered
1 computer desk	$420	Damaged

Prepare the credit note that Quality Furniture Wholesalers sent to PQD Ltd. (Use a document similar to the one illustrated here.)



CREDIT NOTE No.100

Name of Company

Address of company

To: Date:
Recipient Name
Company Name
Address

Quantity	*Description*	*Unit price*	*Total*

TOTAL DEDUCTION FROM ORIGINAL INVOICE

41. Translating an invoice into a transaction description

Based on the invoice prepared in answer to Question 39, write a description of the transaction.

42. Translating a credit note into a transaction description

Based on the credit note prepared in answer to Question 40, write a description of the transaction.

43. Translating source documents into transaction descriptions

An inexperienced accounts clerk has attempted to write descriptions of transactions recorded on some source documents. In each case the description is unsatisfactory.

Here are the descriptions:

1	Received a cheque from account receivable HGR Ltd for $1 720
2	Received a credit note for $420 on 1 October 2018, number 722, for goods purchased on credit
3	Sales for the week ended 6 May 2018 totalled $2 420

In each case, identify the details missing from the descriptions.

44. Translating source documents into transaction descriptions

An inexperienced accounts clerk has attempted to write descriptions of transactions recorded on some source documents. In each case the description is unsatisfactory.

Here are the descriptions:

1	A petty cash voucher dated 4 September 2018 was for $11.50
2	A paying-in slip counterfoil detailed two cheques for $89.40 and $72.50
3	A cash receipt, dated 3 November 2018, was for drawings

In each case, identify the details missing from the descriptions.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260.

Develop your exam skills

PAPER 1

1. If you wished to check the accuracy of the purchases returns book, which of the following should you examine, referring to copies if necessary?
   - A Invoices received
   - B Invoices issued
   - C Credit notes received
   - D Credit notes issued

2. Which of the following source documents should be used for making entries in the sales book?
   - A A credit note received from a supplier
   - B An invoice sent to a customer
   - C A petty cash voucher for travelling expenses paid
   - D A debit note sent to a supplier

3. Entries in the purchases book are taken from:
   - A receipts
   - B credit notes
   - C invoices
   - D delivery notes

4. The purchases book is a book of first entry for:
   - A unpaid expense items
   - B fixtures bought on credit
   - C goods for resale bought for cash
   - D goods for resale bought on credit

5. A paying-in slip counterfoil is used to make entries in the:
   - A sales returns book
   - B petty cash book
   - C cash book
   - D purchases book

6. The owner of a business purchased a new vehicle for business use. A cash deposit of 10% was paid at the time of purchase; the balance is to be paid in two months' time. Which books of original entry(s) should be used to record these transactions?
   - A Journal
   - B Journal and cash book
   - C Purchases book
   - D Purchases book and cash book

7. On 12 July 2018, a credit note was sent to a customer for damaged goods, $100 less 40% trade discount. The returns inwards account to record this transaction should appear in the general ledger as follows:

A

Dr		Returns Inwards		Cr	
			$		$
July	12	Sales returns journal	60		

B

Dr		Returns Inwards		Cr	
			$		$
July	12	Sales returns journal	100		

C

Dr		Returns Inwards		Cr	
			$		$
July	12	Sales returns journal	60		

D

Dr		Returns Inwards		Cr	
			$		$
July	12	Sales returns journal	100		

8. A retailer purchased $1 000 of goods from a supplier on the following terms: 20% trade discount, 10% cash discount if the invoice is paid within 30 days.

Which of the following is the amount the retailer should pay if the invoice is settled 20 days after receipt?

A $700
B $720
C $800
D $900

9. A sale of goods to TJ Williams totalling $400 is subject to 25% trade discount and 5% cash discount if paid within one month. How much will be debited to TJ Williams' account?

A $280
B $285
C $300
D $400

10. Which one of the following should **not** be recorded in the general journal?

A Cancellation of a cash discount
B Entries to open new books of account
C Purchase of a non-current asset for cash
D Transfer of operating expenses account to the profit and loss account

11. Which of the following steps in the accounting cycle should follow the recording of transactions in subsidiary books?

A Preparation of an income statement
B Preparation of a trial balance
C Extracting details from source documents
D Posting information to ledger accounts

12. Which of the following steps in the accounting cycle should follow the receipt of a source document?

A Making entries in a subsidiary book
B Balancing a ledger account
C Preparing an income statement
D Preparing a statement of financial position (balance sheet)

PAPER 2

The following questions are given in the form of case studies. They are designed to give practice in the use of the double-entry accounting system. Note that these case studies are not fully representative of those required for the external examinations because of the limited coverage of the syllabus so far.

Case study 1: Jacqueline Garcia

This case study is designed to test understanding of various aspects of the double-entry system by asking a series of 15 questions requiring a short response.

Part A

Jacqueline Garcia opened a retail unit selling jewellery on 1 February 2018 with the following:

	$
Cash at bank	5 000
Furniture and equipment	34 000
Vehicle	42 000

The purchase of these assets was financed partly by Jacqueline and partly by a bank loan of $25 000.

a. Calculate the opening capital.
b. Prepare a journal entry to open the business's books of account.
c. State which of the assets is the most liquid.

Part B

Jacqueline purchases most of her inventory of jewellery from National Diamond Wholesale Ltd. This supplier is prepared to give a trade discount of 25% on all orders above $8 000.

On 10 February 2018, Jacqueline ordered jewellery from this supplier with a gross value of $12 000.

d. How much will Jacqueline be charged for this order?
e. What source document will Jacqueline receive stating the amount charged?

f. In which books of original entry should this transaction first be recorded?

g. Name one other book of original entry Jacqueline will need in order to record credit transactions involving inventory and the source document that will be used for making entries in this book.

Part C

National Diamond Wholesale Ltd is prepared to give Jacqueline's business a cash discount of 5% under certain conditions.

h. How will a cash discount benefit:
   i Jacqueline
   ii National Diamond Wholesale Ltd?

i. How will any cash discount given by National Diamond Wholesale Ltd be recorded in Jacqueline's books of account (including end-of-year financial statements)?

Part D

Jacqueline expected to make many small payments in cash, so she used a petty cash book with an imprest of $150 per month.

j. What is meant by the term 'imprest'?

k. What source document is used to provide evidence of petty cash transactions?

l. What part do analysis columns play in the double-entry process?

m. During February 2018, petty cash payments totalled $90. How much did the petty cashier require to restore the float?

n. What is the double-entry record in the books of account when the petty cash float is restored?

o. How will the balance of petty cash in hand be shown in the end-of-year financial statements?

Case study 2: Fray's Retail Store

This case study covers the preparation of a complete accounting system, including books of original entry, ledger accounts, trial balance and end-of-year financial statements.

Louise Fray owns Fray's Retail Store. Her business's trial balance at 1 August 2018 was as follows.

Trial balance at 1 August 2018		
	Dr	Cr
	$	$
Accounts payable: Erskin Co. Ltd		6600
Accounts receivable: Ouswa Ltd	1400	
Bank overdraft		4490
Capital		312250
Cash	1470	
Cleaning expenses	460	
Discounts allowed	820	
Discounts received		1240
Drawings	31250	
Non-current assets	380000	
Operating expenses	48900	
Petty cash in hand	20	
Postage and stationery	410	
Purchases	282700	
Purchases returns		2320
Sales		423670
Sales returns	1990	
Vehicle expenses	1150	
	750570	750570

Louise maintains a full accounting system, including a petty cash book with analysis columns for cleaning expenses, postage and stationery (combined) and vehicle expenses.

The following source documents were available for August 2018.

Date		Source document	Transaction
Aug	1	Cheque counterfoil	To restore petty cash float, $130
	3	Cash receipt	Operating expenses, $880
	5	Petty cash voucher	Cleaning costs, $32 (voucher 511)
	8	Till roll	Cash sales totalling $4 450
	9	Invoice	From Erskin Co. Ltd (number 3739) for goods, $9 600 less 33 ⅓% trade discount
	11	Paying-in slip counterfoil	Banked $4 300 cash
	12	Petty cash voucher	Vehicle fuel, $25 (voucher 512)
	13	Credit note	From Erskin Co. Ltd (number 448) for goods, $630 less 33 ⅓% trade discount, goods not as ordered
	15	Invoice	From Fordpark Ltd (number 828) for equipment for business use, $3 200
	16	Cheque counterfoil	For Louise's drawings, $720
	18	Petty cash voucher	Postage and stationery, $20 (voucher 513)
	19	Paying-in slip counterfoil	For cheque received from Ouswa Ltd in settlement of their account at this date less 2% cash discount
	20	Sales invoice	Sent to Ouswa Ltd for goods, $2 250 less 20% trade discount (number 3032)
	21	Cheque counterfoil	Payment of amount due to Erskin Co. Ltd on 1 August less 5% cash discount
	22	Cheque counterfoil	Purchase of goods for resale, $880
	23	Petty cash voucher	Vehicle fuel, $25 (voucher 514)
	25	Credit note	Sent to Ouswa Ltd for goods, $440 less 20% trade discount (number 1017)
	26	Letter	From Fordpark Ltd agreeing to the deduction of $210 from the amount due as an allowance for slight damage to equipment purchased on 15 August
	28	Cheque counterfoil	Paid Fordpark Ltd the amount due
	30	Petty cash voucher	Cleaning costs, $38 (voucher 515)

Prepare:

a. books of original entry to record these transactions, including folio references

b. all the accounts in the purchases, sales and general ledgers, showing folio references

c. a trial balance at 31 August 2018

d. an income statement (trading and profit and loss accounts) for the year ended 31 August 2018

e. statement of financial position (balance sheet) (classified) at 31 August 2018.

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260.

4 Ledgers and the trial balance

Setting the scene

In this chapter you will have the opportunity to learn a little more about ledger accounts, in particular:

- the ways in which ledger accounts can be classified
- the structure of the accounting system leading to the preparation of a trial balance
- how to interpret entries and balances in ledger accounts

This chapter also provides an opportunity to develop your skills and review your understanding of the double-entry accounting system. It includes a worked example of an accounting system up to and including the preparation of a trial balance.

Syllabus coverage

This chapter covers the remaining aspects of Section 4 of the syllabus not covered in the previous chapters.

	Syllabus	Unit
1	Describe the different classes of accounts	4.1
2	Identify the different types of ledgers	
5	Post from books of original entry to the general ledger and the subsidiary ledgers	4.2
7	Interpret entries and balances	4.1

Link

Other aspects of Section 4 of the syllabus (syllabus objectives 3, 4, 6, 8 and 9) have been covered in Chapter 2, Units 2.4, 2.6 and 2.8.

4.1 Types of accounts and ledgers

Objectives

By the end of this unit you will be able to:

- describe the different classes of accounts
- identify the different types of ledgers
- interpret entries and balances.

Key terms

Nominal accounts: accounts recording expenses and incomes.

Real accounts: accounts recording assets.

Personal accounts: accounts of credit customers and credit suppliers.

Different classes of accounts

Ledger accounts can be divided into different categories as follows:

- **Nominal accounts**: recording gains (incomes) and losses (expenses)
- **Real accounts**: asset accounts
- **Personal accounts**: the accounts of people or organizations who have supplied goods or services or credit, or to whom goods or services have been sold on credit.

Here are some examples of these types of account:

Nominal	Real	Personal
Expenses	Premises	Accounts payable
Purchases	Machinery	Accounts receivable
Sales	Equipment	
Discounts received	Motor vehicles	
Interest received	Furniture and fittings	

There are also:

- Liability accounts: for amounts due to other organizations
- Capital accounts: for accounts recording the interest of the owner(s) of the business.

Tip

The cash book can also be regarded as a ledger as it includes two accounts: cash and bank.

Different ledgers

Ledger accounts are grouped in different ledgers as follows:

- General ledger: for nominal, real, liability and capital accounts
- Sales ledger (or accounts receivable ledger): for the accounts of credit customers
- Purchases ledger (or accounts payable ledger): for the accounts of credit suppliers.

Note:

- two real accounts – the cash account and bank account – are normally recorded separately in a cash book (see Chapter 3).

Practice questions

1. Classifying ledger accounts

Complete the following table. Identify the type of account and the ledger in which the account would be recorded. The first item has been answered as an example.

	Account	Type of account	Ledger
a.	*Khan, a credit supplier*	*Personal*	*Purchases*
b.	Delivery vehicles		
c.	Vehicle running expenses		
d.	Discounts allowed		
e.	Shop premises		
f.	Interest received		
g.	Faye, a credit customer		

2. Classifying ledger accounts

Complete the following table. Identify the type of account and the ledger in which the account would be recorded.

	Account	Type of account	Ledger
a.	Purchases		
b.	M Ltd (an account receivable)		
c.	Fittings		
d.	Dillon (an account payable)		
e.	Discounts received		
f.	Machinery		
g.	Bank charges		

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Interpreting account entries and balances

It is important that you can explain in detail what an account shows, as well as being able to prepare entries in accounts.

The best approach is to:

- take each entry in date order
- describe the transaction that has caused the entry to be made (including where appropriate a mention of the source document involved)
- state the amount.

Tip

A good test of how well you have interpreted an account is to ask yourself: "Could I prepare the account accurately from the answer I have given?"

Illustration 1

Interpreting the account of a credit customer

Dr		Sherwin Romon (Account No. 32)			Cr	
			$			$
Mar	1	Balance b/d	3400	Mar 8	Bank	3230
	19	Sales	12840		Discounts allowed	170
				23	Returns inwards	590
				31	Balance c/d	12250
			16240			16240
April	1	Balance b/d	12250			

The account reveals the following details:

March 1	The credit customer Sherwin Romon owes $3 400.
March 8	Sherwin Romon settles the amount outstanding on 1 March by cheque, $3230. Sherwin is allowed a cash discount of $170. The cash discount is 5% (see workings below).
March 19	Goods are sold on credit to Sherwin Romon. The sales invoice is for $12 840.
March 23	Sherwin Romon returns goods sold on credit. The credit note sent to Sherwin is for $590.
March 31/ April 1	Sherwin Romon owes $12250.

The percentage cash discount can be calculated as follows:

$$\frac{\text{cash discount} \times 100}{\text{amount settled}}$$

i.e. in this example:

$$\frac{\$170}{\$3400} \times 100 = 5\%$$

Illustration 2

Interpreting a capital account

Dr		Capital account (Account No. 15)			Cr	
			$			$
2018				2018		
Dec	31	Drawings	24800	Jan 1	Balance b/d	88500
	31	Balance c/d	103670	Aug 15	Equipment	4500
				Dec 31	Net profit	35470
			128470			128470
				2019		
				Jan 1	Balance b/d	103670

The account reveals the following details:

Jan 1	The value of the owner's investment in the business is $88 500 at the beginning of 2018.
Aug 15	The owner introduces additional capital into the business in the form of some equipment valued at $4 500.
Dec 31	The business has made a net profit increasing the value of the owner's capital by $35 470.
Dec 31	The owner's total drawings for the year have reduced the value of capital by $24 800.
Dec 31/ Jan 1	The value of the owner's investment in the business is $103 670 at the end of 2018/beginning of 2019.

Practice questions

3. Interpreting the account of a credit supplier

Here is the account of a credit supplier in the books of the business owned by Janard.

Dr		TDK Supplies (Account No. 11)			Cr
		$			$
June 15	Bank	8 580	June 1	Balance b/d	8 800
15	Discount received	220	11	Purchases	14 600
25	Returns outwards	190			
30	Balance c/d	14 410			
		16 240			16 240
			July 1	Balance b/d	14 410

Explain the entries in the ledger account.

4. Interpreting the account of a credit customer

Here is the account of a credit customer in the books of the business owned by Leta.

Dr		Umar's Stores (Account No. 29)			Cr
		$			$
Sept 1	Balance b/d	500	Sept 9	Returns inwards	85
3	Sales	873	25	Bank	490
			25	Discounts allowed	10
			30	Balance c/d	788
		1 373			1 373
Oct 1	Balance b/d	788			

Explain the entries in the ledger account.

5. Interpreting general ledger accounts

Here are two accounts in a business's general ledger.

Dr		Bank loan (Account No. 3)			Cr			
			$				$
2018				2018			
Oct	15	Bank	3000	Jan	1	Balance b/d	10000
Dec	31	Balance c/d	7000				
			10000				10000
				2019			
				Jan	1	Balance b/d	7000

Dr		Capital (Account No. 5)			Cr			
			$				$
2018				2018			
Dec	31	Drawings	11400	Jan	1	Balance b/d	104000
	31	Net loss	3480				
	31	Balance c/d	89020				
			104000				104000
				2019			
				Jan	1	Balance b/d	89020

Explain the entries in the ledger accounts.

6. Interpreting general ledger accounts

Here are two accounts in a business's general ledger.

Dr		Bank loan (Account No. 5)			Cr			
			$				$
2018				2018			
Dec	31	Balance c/d	18400	Jan	1	Balance b/d	13400
				Sept	1	Bank	5000
			18400				18400
				2019			
				Jan	1	Balance b/d	18400

Dr		Motor vehicles (Account No. 27)			Cr			
			$				$
2018				2018			
Jan	1	Balance b/d	33600	Feb	3	Bank	5200
April	4	Bank	19200	Dec	31	Balance c/d	47600
			52800				52800
2019							
Jan	1	Balance b/d	47600				

Explain the entries in the ledger accounts.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

4.2 Review - posting from books of original entry

Objectives

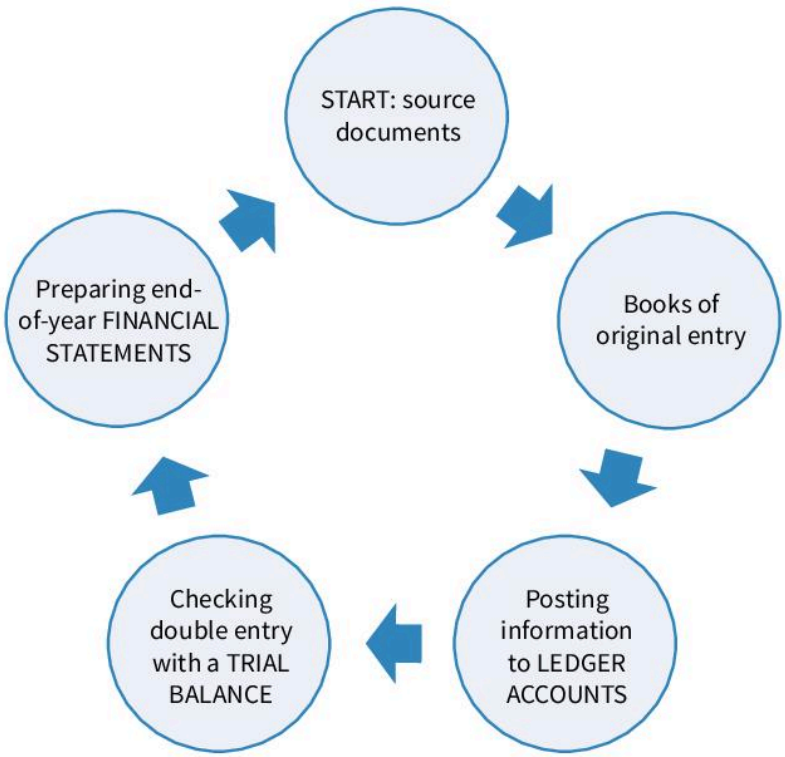
By the end of this unit you will be able to:

- review the accounting cycle
- post from books of original entry to ledger accounts
- check the accuracy of the ledger accounts.

This unit provides an opportunity to review a major part of the double-entry process. There is a fully worked example of how entries are made in ledger accounts posting details from books of original entry.

Review the accounting cycle

In this unit the focus is on the following aspects of the accounting cycle:



Posting from the books of original entry to ledger accounts

Entries in the general, sales and purchases ledgers are all made from details first recorded in the books of original entry. Apart from recording opening balances, entries should never be made in ledger accounts from anywhere other than the books original entry.

Illustration 3

Preparing ledger accounts from books of original entry

Here is a business's trial balance at 1 May 2018.

Sophie's Marine Stores

Trial balance at 1 May 2018

	Folio	$	$
Accounts payables			
Jaden Supplies	PL1		2 800
Lesia Ltd	PL2		3 600
Accounts receivable			
Jacinta Stores	SL1	1 500	
Yari Retail Units	SL2	2 290	
Bank	CB31	4 400	
Capital	GL1		47 770
Cash	CB31	850	
Discounts allowed	GL2	440	
Discounts received	GL3		590
Drawings	GL4	20 240	
General expenses	GL5	32 620	
Non-current assets	GL6	58 000	
Petty cash in hand	PCB3	30	
Purchases	GL7	83 420	
Sales	GL8		149 500
Returns inwards	GL9	2 460	
Returns outwards	GL10		2 830
Travel expenses	GL11	840	
		207 090	207 090

The books of original entry have been prepared and are shown below.

You will notice that at this stage folio references, linking the books of original entry to ledger accounts, have not been entered. Folio references are only recorded in the books of original entry when transactions are posted to ledger accounts. Actually, individual entries will be posted to ledger accounts as soon as possible after they are entered in the books of original entry. It is important, for example, that the accounts of accounts payable and accounts receivable are kept up to date.

Purchases book				Page 28
Date	Supplier	Invoice number	Folio	$
May 10	Jaden Supplies	B4372		4820
22	Lesia Ltd	S2972		3680
31	Total purchases			8500

Sales book				Page 42
Date	Customer	Invoice number	Folio	$
May 7	Jacinta Stores	J1006		2400
19	Yari Retail Units	J1007		1850
31	Total sales			4250

Returns inwards book				Page 7
Date	Customer	Credit note number	Folio	$
May 17	Jacinta Stores	X306		250
29	Yari Retail Units	X307		140
31	Total returns inwards			390

Returns outwards book				Page 9
Date	Supplier	Credit note number	Folio	$
May 21	Jaden Supplies	P422		580
26	Leslia Ltd	R117		470
31	Total returns outwards			1050

Dr	CASH BOOK										Page 31	Cr
		Folio	Disc all	Cash	Bank			Folio	Disc rec	Cash	Bank
			$	$	$				$	$	$
May 1	Balances	b/d		850	4400	May 1	Petty cash	PCB4			120
11	Sales			2120		12	Bank	C		2300	
12	Cash	C		2300		14	Jaden Supplies		140		2660
14	Jacinta Stores		30		1470	18	Lesia Ltd		180		3420
23	Sales			1960		21	General expenses			320	
24	Cash	C		1500		23	Drawings				520
30	Yari Retail Units		80	3920		24	Bank	C		1500	
			110						320		

Petty cash book						Page 4
Receipts	Date	Details	Folio/ Voucher	Payments	General expenses	Travel expenses
$				$	$	$
30	May 1	Balance	b/d			
120	1	Bank	CB31			
	11	Train fares	56	43		43
	14	Cleaning	57	23	23	
	19	Taxis	58	29		29
	28	Stationery	59	11	11	
				106	34	72

General journal				Page 4
			Dr	Cr
			$	$
May 31	Discounts received		140	
	Jaden Supplies			140
	Cancellation of discount as payment made outside date limit			

Stage 1

Entries relating to individual transactions in the books of original entry are posted to ledger accounts and folio references are completed.

The books of original entry are shown again with folio references completed.

Tip

It is easy to forget to post totals from the books of original entry at the end of a month.

Stage 2

Totals from the purchases, sales and returns books, cash book discount columns and petty cash book analysis columns are posted to the ledger accounts.

Stage 3

The cash book and ledger accounts are balanced before preparing the trial balance.

Stage 4

A trial balance is prepared at the end of May 2018.

Purchases book				Page 28
Date	Supplier	Invoice number	Folio	$
May 10	Jaden Supplies	B4372	PL1	4820
22	Lesia Ltd	S2972	PL2	3680
31	Total purchases		GL7	8500

Sales book				Page 42
Date	Customer	Invoice number	Folio	$
May 7	Jacinta Stores	J1006	SL1	2400
19	Yari Retail Units	J1007	SL2	1850
31	Total sales		GL8	4250

Returns inwards book				Page 7
Date	Customer	Credit note number	Folio	$
May 17	Jacinta Stores	X306	SL1	250
29	Yari Retail Units	X307	SL2	140
31	Total returns inwards		GL9	390

Returns outwards book				Page 9
Date	Supplier	Credit note number	Folio	$
May 21	Jaden Supplies	P422	PL1	580
26	Leslia Ltd	R117	PL2	470
31	Total returns outwards		GL10	1050

Dr	CASH BOOK										Page 31	Cr
		Folio	Disc all	Cash	Bank			Folio	Disc rec	Cash	Bank
			$	$	$				$	$	$
May 1	Balances	b/d		850	4400	May 1	Petty cash	PCB4			120
11	Sales	GL8		2120		12	Bank	C		2300	
12	Cash	C		2300		14	Jaden Supplies	PL1	140		2660
14	Jacinta Stores	SL1	30		1470	18	Lesia Ltd	PL2	180		3420
23	Sales	GL8		1960		21	General expenses	GL5		320	
24	Cash	C			1500	23	Drawings	GL4			520
30	Yari Retail Units	SL2	80		3920	24	Bank	C		1500	
						31	Balances	c/d		3110	4570
		GL2	110	7230	11290			GL3	320	7230	11290
June 1	Balances	b/d		3110	4570						

Petty cash book						Page 4
Receipts	Date	Details	Folio/ Voucher	Payments	General expenses	Travel expenses
$				$	$	$
30	May 1	Balance	b/d			
120	1	Bank	CB31			
	11	Train fares	56	43		43
	14	Cleaning	57	23	23	
	19	Taxis	58	29		29
	28	Stationery	59	11	11	
				106	34	72
	31	Balance	c/d	44	GL4	GL11
150				150		
44	June 1	Balance	b/d			

General journal				Page 4
			Dr	Cr
			$	$
May 31	Discounts received	GL3	140	
	Jaden Supplies	PL1		140
	Cancellation of discount as payment made after date limit			

Here are the general, purchases and sales ledgers showing opening balances and the transactions posted at this stage from the books of original entry.

GENERAL LEDGER

Dr	Capital (Account No. 1)						Cr
			$				$
				May 1	Balance	b/d	47 770

Dr	Discounts allowed (Account No. 2)						Cr
			$				$
May 1	Balance	b/d	440	May 31	Balance	c/d	550
31	Cash book	CB31	110				
			550				550
June 1	Balance	b/d	550				

Dr	Discounts received (Account No. 3)						Cr
			$				$
May 31	Jaden Supplies	J4	140	May 1	Balance	b/d	590
31	Balance	c/d	770	31	Cash book	CB31	320
			910				910
				June 1	Balance	b/d	770

Dr		Drawings (Account No. 4)					Cr
			$				$
May 1	Balance	b/d	20 240	May 31	Balance	c/d	20 760
23	Cash book	CB31	520				
			20 760				20 760
June 1	Balance	b/d	20 760				

Dr		General expenses (Account No. 5)					Cr
			$				$
May 1	Balance	b/d	32 620	May 31	Balance	c/d	32 974
21	Cash book	CB31	320				
31	Petty cash	PCB4	34				
			32 974				32 974
June 1	Balance	b/d	32 974				

Dr		Non-current assets (Account No. 6)					Cr
			$				$
May 1	Balance	b/d	58 000				

Dr		Purchases (Account No. 7)					Cr
			$				$
May 1	Balance	b/d	83 420	May 31	Balance	c/d	91 920
31	Purchases book	PB28	8 500				
			91 920				91 920
June 1	Balance	b/d	91 920				

Dr		Sales (Account No. 8)					Cr
			$				$
May 31	Balance	c/d	157 830	May 1	Balance	b/d	149 500
				11	Cash book	CB31	2 120
				24	Cash book	CB31	1 500
				31	Sales book	SB42	4 250
			157 830				157 830
				June 1	Balance	b/d	157 830

Dr		Returns inwards (Account No. 9)					Cr
			$				$
May 1	Balance	b/d	2 460	May 31	Balance	c/d	2 850
31	Returns inwards book	RIB7	390				
			2 850				2 850
June 1	Balance	b/d	2 850				

Dr			Returns outwards (Account No. 10)				Cr
			$				$
May 31	Balance	c/d	3880	May 1	Balance	b/d	2830
				31	Returns outwards book	ROB9	1050
			3880				3880
				June 1	Balance	b/d	3880

Dr			Travel expenses (Account No. 11)				Cr
			$				$
May 1	Balance	b/d	840	May 31	Balance	c/d	912
31	Petty cash	PCB4	72				
			912				912
June 1	Balance	b/d	912				

PURCHASES LEDGER

Dr			Jaden Supplies (Account No. 1)				Cr
			$				$
May 14	Bank	CB31	2660	May 1	Balance	b/d	2800
14	Discounts received	CB31	140	10	Purchases book	PB28	4820
21	Returns outwards	ROB9	580	31	Disc rec (cancel)	J4	140
31	Balance	c/d	4380				
			7760				7760
				June 1	Balance	b/d	4380

Dr			Lesia Ltd (Account No. 2)				Cr
			$				$
May 18	Bank	CB31	3420	May 1	Balance	b/d	3600
18	Discounts received	CB31	180	22	Purchases book	PB28	3680
26	Returns outwards	ROB9	470				
31	Balance	c/d	3210				
			7280				7280
				June 1	Balance	b/d	3210

SALES LEDGER

Dr	Jacinta Stores (Account No. 1)						Cr
			$				$
May 1	Balance	b/d	1500	May 14	Bank	CB31	1470
7	Sales book	SB42	2400	14	Discounts allowed	CB31	30
				17	Returns inwards	RIB7	250
				31	Balance	c/d	2150
			3900				3900
June 1	Balance	b/d	2150				

Dr	Yari Retail Units (Account No. 2)						Cr
			$				$
May 1	Balance	b/d	2290	May 29	Returns inwards	RIB7	140
19	Sales book	SB42	1850	30	Bank	CB31	3920
				30	Discounts allowed	CB31	80
			4140				4140

Sophie's Marine Stores

Trial balance at 31 May 2018			
	Folio	$	$
Accounts payables			
Jaden Supplies	PL1		4380
Lesia Ltd	PL2		3210
Accounts receivable			
Jacinta Stores	SL1	2150	
Yari Retail Units	SL2	–	
Bank	CB31	4570	
Capital	GL1		47770
Cash	CB31	3110	
Discounts allowed	GL2	550	
Discounts received	GL3		770
Drawings	GL4	20760	
General expenses	GL5	32974	
Non-current assets	GL6	58000	
Petty cash in hand	PCB3	44	
Purchases	GL7	91920	
Sales	GL8		157830
Returns inwards	GL9	2850	
Returns outwards	GL10		3880
Travel expenses	GL11	912	
		217840	217840

Practice questions

7. Posting purchases, sales and returns books to ledger accounts

Dewain has prepared some books of original entry for transactions in February 2018.

Purchases book				Page 28
Date	Supplier	Invoice number	Folio	$
Feb 10	Alissa Stores	K429		3 490
22	Tyrell Wholesale	D2297		4 870
28	Total purchases			8 360

Sales book				Page 42
Date	Customer	Invoice number	Folio	$
Feb 9	Brittney Ltd	8 382		1 120
17	Sameer Retail Ltd	8 383		3 360
28	Total sales			4 480

Returns inwards book				Page 7
Date	Customer	Credit note number	Folio	$
Feb 14	Brittney Ltd	185		170
22	Sameer Retail Ltd	186		330
28	Total returns inwards			500

Returns outwards book				Page 9
Date	Supplier	Credit note number	Folio	$
Feb 17	Alissa Stores	R518		280
27	Tyrell Wholesale	B48		590
28	Total returns outwards			870

The following balances appeared in the personal accounts on 1 February 2018:

Purchases ledger	Alissa Stores	$4 400
	Tyrell Wholesale	$2 800
Sales ledger	Brittney Ltd	$960
	Sameer Retail Ltd	$1 680

a. Prepare the personal accounts in the purchases and sales ledgers. (Note: you will also use these accounts to answer Question 9.)

b. Prepare the purchases, sales and returns accounts in the general ledger.

8. Posting purchases, sales and returns books to ledger accounts

Dominique has prepared some books of original entry for transactions in January 2018.

Purchases book				Page 25
Date	Supplier	Invoice number	Folio	$
Jan 7	BPQ Wholesale	6843		12 500
15	City Stores Ltd	4523		9 200
31	Total purchases			21 700

Sales book				Page 37
Date	Customer	Invoice number	Folio	$
Jan 6	Island Retail Ltd	4782		2 940
18	WPZ Ltd	4783		3 130
31	Total sales			6 070

Returns inwards book				Page 6
Date	Customer	Credit note number	Folio	$
Jan 11	Island Retail Ltd	449		210
25	WPZ Ltd	450		80
31	Total returns inwards			290

Returns outwards book				Page 5
Date	Supplier	Credit note number	Folio	$
Jan 10	BPQ Wholesale	K441		840
21	City Stores Ltd	7821		390
31	Total returns outwards			1 230

The following balances appeared in the personal accounts on 1 January 2018:

Purchases ledger	BPQ Wholesale	$8 400
	City Stores Ltd	$5 200
Sales ledger	Island Retail Ltd	$3 020
	WPZ Ltd	$1 240

a. Prepare the personal accounts in the purchases and sales ledgers. (Note: you will also use these accounts to answer Question 10.)

b. Prepare the purchases, sales and returns accounts in the general ledger.

9. Posting the cash book and general journal to ledger accounts

Dewain (see Question 7) has also prepared a cash book and a general journal. Extracts from these books of original entry are as follows.

Dr — **CASH BOOK** — **Page 17** — **Cr**

		Folio	Disc All	Cash	Bank			Folio	Disc Rec	Cash	Bank
			$	$	$				$	$	$
Feb 9	Brittney Ltd		24		936	Feb 5	Alissa Stores		88		4312
25	Sameer Retail Ltd		42		1638	12	Tyrell Wholesale		56		2744
			66						144		

General journal — **Page 3**

		Folio	Dr	Cr
			$	$
Feb 28	Sameer Retail ltd		42	
	Discount allowed			42
	Cancellation of discount as payment made after date limit			

a. Make further entries in the purchases and sales ledger accounts (see Question 7) posting from the cash book and general journal.
b. Prepare the discount accounts in the general ledger.
c. Balance the personal accounts on 31 May 2018.

10. Posting the cash book and general journal to ledger accounts

Dominique (see Question 8) has also prepared a cash book and a general journal. Extracts from these books of original entry are as follows.

Dr — **CASH BOOK** — **Page 12** — **Cr**

		Folio	Disc All	Cash	Bank			Folio	Disc Rec	Cash	Bank
			$	$	$				$	$	$
Jan 3	Island Retail Ltd		40		1560	Jan 9	BPQ Wholesale		210		8190
8	WPZ Ltd		30		1210	28	City Stores Ltd		260		4940
			70						470		

General journal			Page 2
	Folio	Dr	Cr
		$	$
Jan 30 Discounts received		130	
City Stores Ltd			130
Reduction in discount as payment made after date limit			

a. Make further entries in the purchases and sales ledger accounts posting from the cash book and general journal (see Question 9).

b. Prepare the discount accounts in the general ledger.

c. Balance the personal accounts on 31 January 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. Which of the following is a real account in the accounts of a shoe retailer?
   - A Bank loan
   - B Capital
   - C Equipment
   - D Account payable: QR Wholesale

2. Which of the following is a nominal account in the accounts of a supermarket?
   - A Cash at bank
   - B Discounts received
   - C Drawings
   - D Premises

3. Which of the following is the correct treatment of the totals of the sales book and returns outwards book?

	Debit	Credit
A	Returns outwards account Sales account	
B		Returns outwards account Sales account
C	Returns outwards account	Sales account
D	Sales account	Returns outwards account

4. Which of the following is the correct treatment of the totals of the purchases book and returns inwards book?

	Debit	Credit
A	Purchases account Returns inwards account	
B		Purchases account Returns inwards account
C	Returns inwards account	Purchases account
D	Purchases account	Returns inwards account

PAPER 2

Case study: Dwight Scott

This case study involves the preparation of a full accounting system including end-of-year financial statements based on completed books of original entry.

Dwight Scott owns a wholesale business, Scott Wholesale Supplies, which provides local hotels and restaurants with fresh produce. May is the last month of the business's financial year. On 1 May the business's trial balance was as follows.

Trial balance at 1 May 2018		
	Dr	Cr
	$	$
Accounts payable: KPZ Ltd		12400
Accounts receivable: XTY Retail	5200	
Bank	3500	
Capital		64900
Cash	2180	
Discounts allowed	660	
Discounts received		1280
Drawings	39480	
Non-current assets	98000	
Office expenses	480	
Operating expenses	112500	
Petty cash in hand	40	
Purchases	484720	
Returns inwards	2830	
Returns outwards		4850
Sales		668780
Stationery	440	
Vehicle expenses	2180	
	752210	752210

Dwight's bookkeeper has already prepared the business's books of original entry for May 2018. The transactions have yet to be posted to the purchases, sales and general ledgers.

Journal				Page 5
Date	Details	Folio	Dr	Cr
			$	$
May 20	Equipment and fittings		4600	
	PTP Offices Ltd			4600
	Purchase of fittings for business use on credit, invoice number 10742			

Petty cash book							Page 8
Receipts	Date	Details	Folio/ voucher	Payments	Vehicle expenses	Office expenses	Stationery
$				$	$	$	$
40.00	May 1	Balance	b/d				
120.00	1	Cheque	CB9				
	4	Vehicle fuel	473	30.30	30.30		
	12	Stationery	474	18.73			18.73
	14	Office expenses	475	9.42		9.42	
	17	Stationery	476	11.50			11.50
	18	Vehicle fuel	477	24.22	24.22		
	21	Office expenses	478	10.10		10.10	
	24	Vehicle fuel	479	25.48	25.48		
	29	Stationery	480	9.77			9.77
	30	Office expenses	481	10.48		10.48	
				150.00	80.00	30.00	40.00
	31	Balance	c/d	10.00			
160.00				160.00			
10.00	June 1	Balance	b/d				

Dr	CASH BOOK							Page 9	Cr
				Discounts allowed	Cash	Bank		Discounts received	Cash	Bank
				$	$	$		$	$	$
May 1	Balances	b/d			2180	3500	May 1 Petty cash	PCB8		120
4	XTY Retail			260		4940	11 KPZ Ltd		310	12090
10	Sales				5850		12 Bank	C	7500	
12	Cash	C				7500	15 Operating expenses			1250
							31 Balances	c/d	530	2480
				260	8030	15940			310	8030	15940
June 1	Balance	b/d			530	2480					

Purchases book				Page 6
Date	Details	Invoice no.	Folio	$
May 16	KPZ Ltd	2723		7350
	Total purchases			7350

Sales book				Page 7
Date	Details	Invoice no.	Folio	$
May 21	XTY Retail	0783		3360
	Total sales			3360

Returns outwards book				Page 2
Date	Details	Credit note no.	Folio	$
May 19	KPZ Ltd	1019		440
	Total returns outwards			440

Returns inwards book				Page 4
Date	Details	Credit note no.	Folio	$
May 26	XTY Retail	084		290
	Total returns inwards			290

Prepare:

a. all the accounts in the purchases, sales and general ledgers, showing folio references after posting entries

b. a trial balance at 31 May 2018

c. an income statement (trading and profit and loss accounts) for the year ended 31 May 2018

d. statement of financial position (balance sheet) (classified) at 31 May 2018.

Note:

- Remember that "returns outwards" is another name for "purchases returns" and "returns inwards" is another name for "sales returns".

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

5 The preparation and analysis of financial statements of sole traders

Key terms

Profitability: a measure of performance highlighting profit in relation to the resources used in a business.

Solvency: a measure of the extent to which a business is able to meet its obligations. (An insolvent business is one that does not have the resources to meet its obligations.)

Setting the scene

In Chapter 2 you were introduced to the preparation of simple income statements. In this chapter you will develop your knowledge of the financial statements of sole traders and develop your skills in preparing these statements. You will learn how to record the value of unsold goods (inventories) and also use an improved form of presentation for the income statement.

Financial statements are designed to provide key stakeholders with valuable information about the performance of the business. In the case of a sole trader, the owner and managers will need to be well informed about how profitable the business is, and also whether it is generating enough funds to pay its way. **Profitability** and **solvency** are vital aspects of ensuring a business is successful. In this chapter you will learn about how best to assess the performance of a business by calculating ratios and how to make recommendations to improve performance.

Syllabus coverage

	Syllabus	Unit
1	Explain the purpose of preparing financial statements	5.1, 5.2
2	Identify the components of the financial statements	
3	Draw up the income statement for sole traders to determine gross profit or loss and net profit or loss	
4	Prepare classified statements of financial position (balance sheets) in vertical style	5.2
5	Explain the significance of working capital for the operation of a business	
6	Use ratios to determine the performance (profitability) of the business	5.3
7	Calculate ratios to determine the financial position of a business	
8	Show the effect of net profit or loss on capital	
9	Make recommendations about a business based on ratio analysis	5.4

5.1 Preparing a sole trader's income statement: the trading account

Objectives

By the end of this unit you will be able to:

- record opening and closing inventories in the general ledger
- prepare trading accounts including opening and closing inventories
- prepare trading and profit and loss accounts including carriage inwards and carriage outwards
- prepare trading accounts using a vertical format.

Until now, it has been assumed that a business will sell everything it buys during a financial period. Of course, this is very unlikely – it would be a rare event to see a shop, for example, with every shelf empty on the last day of the financial year. So the question arises as to how inventory is recorded in the accounting system.

Replacing the word "sales" with "revenue" in financial statements

Tip

Note: sales book, sales ledger and sales account still retain those names.

It has now become usual to use the word "revenue" in preference to the word "sales" when preparing end-of-year financial statements, such as the trading account section of the income statement. You will see that "revenue" is used in the illustrations in this, and later, units.

The effect of inventory on gross profit

So far, gross profit has been based on deducting net purchases from net revenue for a period. If, however, a business did not sell everything it purchased – that is, had an inventory at the end of the trading period – then this would need to be taken account of in the calculation.

Illustration 1

Taking account of a closing inventory

During a financial year, a retailer purchased goods for $150 000; revenue totalled $220 000.

Key term

Closing inventory: goods unsold at the end of a trading period.

At this stage, it looks as if this business has a gross profit of $70 000 (revenue $220 000 less purchases $150 000).

However, suppose the business did not sell everything it purchased and had a **closing inventory** valued at $30 000. Here is a revised calculation of the gross profit.

	$	$
Revenue		220 000
Less value of goods actually sold:		
Purchases	150 000	
Less closing inventory	30 000	
Cost of sales		120 000
Gross profit		100 000

Notes:

- The important idea here is "what goods did the business actually sell?"
- In accounting statements, the value (at cost price) of goods actually sold is called **cost of sales**.

Key term

Cost of sales: the value at cost price of goods sold during a trading period. It is found by: opening inventory + purchases – closing inventory. It is sometimes called the cost of goods sold.

Closing inventory is entered in the trading account as a deduction from purchases. What about the other entry in the double-entry system? An inventory of unsold goods is a business asset, so the other entry records this asset in the general ledger.

Illustration 2

Recording a closing inventory in the general ledger

Here is the inventory account recording the closing inventory of $30 000. Assume the accounting year end is 31 December.

GENERAL LEDGER

Dr			Inventory		Cr
			$		$
Dec	31	Trading account	30 000		

The next thing to consider is what happens about this closing inventory when looking at the next trading period. The answer is that one period's closing inventory becomes the **opening inventory** for the next period.

Notes:

- The entry in the inventory account for the closing inventory is on the debit side because this is the record of an asset.
- This asset will appear on the statement of financial position (balance sheet) at this date. It will be listed as the first of the current assets when using the order of permanence.

Key term

Opening inventory: goods unsold at the beginning of a trading period. In amount, this will be the same as the closing inventory from the previous period.

Practice questions

1. Calculating gross profit when there is a closing inventory

During a financial year a retailer purchased goods for $200 000; revenue totalled $340 000. However, the retailer was not able to sell all the goods that had been purchased and was left with an unsold inventory of goods at the year end, valued at $20 000.

Calculate the gross profit made by the retailer during the year.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

2. Calculating gross profit when there is a closing inventory

During a financial year a retailer purchased goods for $450 000; revenue totalled $660 000. At the end of the year, the retailer had a closing inventory, value $40 000.

Calculate the gross profit made by the retailer during the year.

Illustration 3

Taking account of an opening inventory

The business starts the next financial period with an opening inventory of $30 000.

Purchases total $200 000 and revenue $300 000 during this financial period. At the end of the period, there is a closing inventory of $40 000.

As you now know, the important question to ask is: "What goods were actually sold during the financial period?"

Here is the calculation required to establish this figure based on the details above.

Calculating the value of goods actually sold

	$
Inventory at the beginning of the period	30 000
Add purchases	200 000
Total of goods that could be sold	230 000
Less inventory of unsold goods at end of period	40 000
Value of goods actually sold (cost of sales)	190 000

The calculation of gross profit will be as follows.

	$	$
Revenue		300 000
Less value of goods actually sold:		
Opening inventory	30 000	
Purchases	200 000	
	230 000	
Less Closing inventory	40 000	
		190 000
Gross profit		110 000

Notes:

- The opening inventory + purchases gives a figure for what could be sold.
- What could be sold – closing inventory gives the required answer of the value of goods actually sold (cost of sales).

What entries are made in the inventory account during the year?

At the beginning of the year, the inventory account will show a debit balance (the figure for closing inventory for the previous year is $30 000 in Illustration 3). During the course of the year the inventory account is entirely ignored; this may seem a little strange – surely, you may be thinking, the level of inventory in the business will be changing all the time. However, the inventory account is just used to record the opening inventory and closing inventory and nothing else. All other changes in inventory levels are recorded in the accounting system: increases in inventory are shown in the purchases account (an "inventory in" account) and decreases of inventory are shown in the sales account (an "inventory out" account). When you compile a trial balance at the end of a financial year, it will be the opening inventory that is recorded. This is because it is the only figure in the inventory account at this stage.

In Chapter 10 you will learn how businesses work out the value of their inventories.

Here is the inventory account based on the information in Illustration 3.

This is last year's closing inventory, which then becomes the opening inventory for Year 2 →

This is Year 2's closing inventory, the double entry for which is to be found in the trading account →

Dr **Inventory** **Cr**

			$				$
Yr 1				Yr 2			
Dec	31	Trading account	30 000	Dec	31	Trading account	30 000
Yr 2							
		Trading account					
Dec	31		40 000				

← This entry is to transfer Year 2's opening inventory to the trading account

Tip

Do not be tempted to make any entries in the inventory account during the course of a trading period. The inventory account is only used at the end of a year to transfer the opening inventory to the trading account, and to record the closing inventory for the year.

Practice questions

3. Calculating gross profit when there are opening and closing inventories

A retailer provided the following information for the year ended 31 December 2018:

	$
Inventory at 1 January 2018	20 000
Purchases	480 000
Revenue	710 000
Inventory at 31 December 2018	60 000

Calculate:

a. the value of goods actually sold during the year

b. the gross profit for the year.

4. Calculating gross profit when there are opening and closing inventories

A wholesaler provided the following information for the year ended 31 December 2018:

	$
Inventory at 1 January 2018	80 000
Purchases	880 000
Revenue	1 200 000
Inventory at 31 December 2018	50 000

Calculate:

a. the value of goods actually sold during the year

b. the gross profit for the year.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Preparing a trading account in a vertical format

In previous chapters, you have been used to preparing simple trading accounts as part of the end-of-year income statement in the form of a two-sided ledger account – sometimes called a horizontal format. These days many accountants have switched to using what is called a vertical format for all the end-of-year financial statements.

Why is this? The vertical format, as you will see, gives the opportunity to improve the presentation of financial statements, because there is (theoretically) the possibility of using as many columns as are necessary to set out the information clearly and systematically. The other great benefit is that the vertical format is much more accessible to non-accountants. This means that those individuals (unlike you!) who are

not familiar with the rules of debit and credit, etc., are not so likely to be confused by what they see in the all-important end-of-year financial statements. In fact, the calculation of gross profit shown in Illustration 3 is an example of a vertical presentation of a trading account.

Illustration 4

Preparing a vertical trading account including returns

Miguel owns a retail business. On 31 December 2018 the following information was taken from his books of account.

	$
Purchases	75 000
Returns inwards	3 000
Returns outwards	2 000
Revenue	145 000
Inventories:	
1 January 2018 (opening inventory)	10 000
31 December 2018 (closing inventory)	15 000

The trading account section of the income statement will be as follows.

Miguel
Income statement (trading account) for the year ended 31 December 2018

	$	$	$
Revenue		145 000	
Less Returns inwards		3 000	
			142 000
Opening inventory		10 000	
Add purchases	75 000		
Less returns outwards	2 000		
		73 000	
		83 000	
Less closing inventory		15 000	
Cost of sales			68 000
Gross profit			74 000

Notes:

- In the vertical format, always start with revenue (less returns inwards).
- Now work your way through the calculation of the cost of goods actually sold, remembering to deduct any returns outwards from purchases.
- The figure for goods actually sold ($68 000) should be clearly labelled "Cost of sales".
- Finally, record the gross profit ($74 000) – don't forget to label this figure.

If you look at how the vertical columns have been used in the illustration you will see that:

- the column *furthest on the right* is used to record the really significant figures: net revenue, cost of sales, and gross profit
- the *middle money column* is used to show how these key figures were arrived at
- the *first money column* is used where there is yet more detailed working out to do (in this case, to show purchases less returns outwards).

The same principle about how money columns are used applies to all financial statements.

Practice questions

5. Preparing a vertical trading account

J Lall owns a retail business. His business's financial year ended on 30 November 2018. The following information is available:

	$
Purchases	365 800
Returns inwards	3 700
Returns outwards	4 100
Revenue	551 000
Inventories:	
at 1 December 2017	45 200
at 30 November 2018	56 900

a. Prepare the business's trading account for the year ended 30 November 2018 using a vertical style of presentation.

b. Complete the inventory account in the general ledger.

6. Preparing a vertical trading account

Nico is a wholesaler. His business's financial year ended on 31 December 2018. The following information is available:

	$
Purchases	568 300
Returns inwards	7 200
Returns outwards	9 500
Revenue	945 600
Inventories:	
at 1 January 2018	48 000
at 31 December 2018	39 000

a. Prepare the business's trading account for the year ended 31 December 2018 using a vertical style of presentation.

b. Complete the inventory account in the general ledger.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key term

Carriage inwards: the cost of transporting goods paid by a business on its own purchases. This expense is added to purchases in the trading account section of the income statement.

Carriage inwards

There is one more point to consider when preparing a trading account. Many businesses have to pay for the delivery of goods they purchase. This expense is called **carriage inwards**. When preparing a trading account, carriage inwards should be added to the figure for purchases to show the true cost of buying goods. To achieve this, the balance of the carriage inwards account is transferred to the trading account (rather than the profit and loss account) when preparing the end-of-year financial statements.

Illustration 5

Vertical trading account including carriage inwards

Here is Miguel's trading account from Illustration 4, but this time showing how carriage inwards ($4 000) would be recorded.

Miguel
Income statement (trading account) for the year ended 31 December 2018

	$000	$000	$000
Revenue		145	
Less Returns inwards		3	
			142
Opening inventory		10	
Add Purchases	75		
Less returns outwards	2		
	73		
Carriage inwards	4		
		77	
		87	
Less closing inventory		15	
Cost of sales			72
Gross profit			70

Notes:

- Carriage inwards is transferred from the carriage inwards account to the trading account.
- Carriage inwards has the effect of increasing the cost of sales and therefore reducing the gross profit.

There is also an expense called **carriage outwards**. This is the cost of delivering goods to customers. The correct treatment for carriage outwards is to include it in the profit and loss account along with all the other business running costs.

Key term

Carriage outwards: the cost of transporting goods paid by a business on its sales to customers. This expense is recorded in the profit and loss section of the income statement.

Practice questions

7. Preparing a vertical trading account including carriage inwards

Laurelle owns a wholesale business providing bathroom fittings. Her business's financial year ended on 30 June 2018. The following information is available:

	$
Carriage inwards	8 000
Purchases	105 000
Returns inwards	3 000
Returns outwards	4 000
Revenue	200 000
Inventories:	
at 1 July 2017	7 000
at 30 June 2018	6 000

a. Prepare the business's trading account for the year ended 30 June 2018 using a vertical style of presentation.
b. Complete the inventory account in the general ledger.

8. Preparing a vertical trading account including carriage inwards

Henry owns a retail unit selling men's clothing. His business's financial year ended on 31 July 2018. The following information is available:

	$
Carriage inwards	3 000
Purchases	98 000
Returns inwards	2 000
Returns outwards	5 000
Revenue	184 000
Inventories:	
at 1 August 2017	10 000
at 31 July 2018	14 000

Tip

The two accounts, carriage inwards and carriage outwards, can sound confusing. The key things to remember are that they are both expenses and that carriage inwards is charged to the trading account, but carriage outwards is charged to the profit and loss account.

a. Prepare the business's trading account for the year ended 31 July 2018 using a vertical style of presentation.
b. Complete the inventory account in the general ledger.

9. Preparing end-of-year financial statements

Stephen Morris is the owner of a wholesale business that provides local retailers with household goods. His business's financial year ended on 31 December 2018 when the following trial balance was extracted from the business's books of account.

Trial Balance at 31 December 2018		
	$000	$000
Accounts payable		57
Accounts receivable	48	
Bank loan (repayable 2019)		200
Capital		1633
Carriage inwards	11	
Carriage outwards	16	
Cash at bank	15	
Drawings	64	
Inventory at 1 January 2018	114	
Non-current assets	1 800	
Operating expenses	475	
Purchases	945	
Returns inwards	7	
Returns outwards		19
Revenue		1586
	3 495	3 495

Additional information (in $000): the business's inventory of unsold goods on 31 December 2018 was valued at $73.

Prepare the following:

a. the income statement (trading account in vertical format, profit and loss account in horizontal format) for the year ended 31 December 2018
b. the statement of financial position (balance sheet) at 31 December 2018 (classified) in horizontal format in order of permanence.

Don't forget to head your money columns "$000" when working in thousands of dollars.

10. Preparing end-of-year financial statements

Renea Gobin owns Cashews, a health food business. The following trial balance was prepared on 31 December 2018.

Trial balance at 31 December 2018		
	$	$
Accounts payable		11 721
Accounts receivable	3 369	
Bank overdraft		4 605
Capital		361 395
Carriage inwards	3 372	
Carriage outwards	4 149	
Discounts allowed	828	
Discounts received		971
Drawings	32 447	
Insurance	5 484	
Inventory at 1 January 2018	23 307	
Non-current assets	338 300	
Petty cash in hand	45	
Purchases	148 494	
Returns inwards	3 372	
Returns outwards		2 720
Revenue		249 501
Wages	67 746	
	630 913	630 913

Inventory of unsold goods on 31 December 2018 valued at $11 708.

Prepare the following:

a. the income statement (trading account in vertical format, profit and loss account in horizontal format) for the year ended 31 December 2018
b. the statement of financial position (balance sheet) at 31 December 2018 (classified) in horizontal format in order of permanence.

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

5.2 Preparing a sole trader's other financial statements using a vertical format

Objectives

By the end of this unit you will be able to:

- prepare a profit and loss account using a vertical format
- prepare a statement of financial position (balance sheet) using a vertical format.

In this unit you will continue your review of the income statement, this time by looking at how a profit and loss account should be presented using the vertical format.

Vertical format for the profit and loss account

Applying what you know about using the vertical format for the trading account, it is now possible to look at how a vertical profit and loss account should appear.

Illustration 6

Preparing a vertical profit and loss account

Bobby has produced the following profit and loss account for his business using a horizontal format.

Income statement (profit and loss account) for the year ended 31 July 2018

	$		$
Carriage outwards	4 000	Gross profit	85 000
Discounts allowed	1 000	Discounts received	3 000
General expenses	5 000		
Rent	7 000		
Wages	28 000		
Net profit	43 000		
	88 000		88 000

Here is the same profit and loss account, but in vertical form.

Bobby Income statement (profit and loss account) for the year ended 31 July 2018		
	$	$
Gross profit	85 000	
Discounts received	3 000	
		88 000
Carriage outwards	4 000	
Discounts allowed	1 000	
General expenses	5 000	
Rent	7 000	
Wages	28 000	
		45 000
Net profit		43 000

Notes:

- Always start with the gross profit and add any additional income (for example, discounts received) to achieve a subtotal.
- List all the expenses and subtotal these.
- Complete the format with the net profit (or loss) correctly labelled.
- Two columns are almost always sufficient for a profit and loss account.

Practice questions

11. Preparing a vertical profit and loss account

Lorraine has produced her business's profit and loss account in a horizontal form as follows.

Lorraine Income statement (profit and loss account) for the year ended 31 May 2018			
	$		$
Administration expenses	21 000	Gross profit	171 000
Electricity	27 000	Discounts received	8 000
Insurance	24 000		
Interest on bank loan	8 000		
Wages and salaries	78 000		
Net profit	21 000		
	179 000		179 000

Redraft this profit and loss account in vertical format.

12. Preparing a vertical profit and loss account

Rodney is preparing his business's end-of-year financial statements. The business has made a gross profit of $98 000. The following information has been extracted from the books of accounts for the year under review, ended 3 September 2018:

	$
Carriage outwards	9 200
Discounts allowed	4 700
Discounts received	5 900
Electricity charges	10 200
General expenses	11 300
Rent	27 900
Salaries	38 500
Water charges	8 400

Prepare the business's profit and loss account in a vertical format for the year ended 30 September 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Detailed capital section on a statement of financial position (balance sheet)

The owners of many businesses choose to show more information about their capital on the statement of financial position. This can make the statement of financial position even more helpful to users.

Illustration 7

Setting out a detailed capital section on a statement of financial position (balance sheet)

The following capital account appears in a business's general ledger.

Dr				Capital					Cr
				$					$
Dec	31	Drawings		30 000	Jan	1	Balance	b/d	100 000
	31	Balance	c/d	110 000	Dec	31	Net profit		40 000
				140 000					140 000
					Jan	1	Balance	b/d	110 000

On the statement of financial position (balance sheet) at 31 December, the owner has the choice of presenting this information in two ways:

Option 1: quoting final balance only

Statement of financial position (balance sheet) at 31 December 2018 (extract)			
		$	$
	CAPITAL		110 000

Option 2: providing detail about capital

Statement of financial position (balance sheet) at 31 December 2018 (extract)			
		$	$
	CAPITAL		
	Opening balance	100 000	
	Net profit	40 000	
		140 000	
	Drawings	30 000	
			110 000

Why is Option 2 potentially more useful? At a glance, the owner can see how much profit has been made in relation to his or her investment at the beginning of the year. The owner can also see whether profit was sufficient to cover drawings, resulting in an increase in capital by the end of the year.

Preparing a vertical statement of financial position (balance sheet)

A vertical statement of financial position (balance sheet) is now the most popular form of presenting this financial statement. Not only does it present information in a way which is more user friendly, but it also provides the flexibility to show an important subtotal that cannot be recorded in the horizontal format. This subtotal is the difference between current assets and current liabilities, which is called **working capital** (and sometimes **net current assets**). This figure is important for the owner and managers of a sole-trader business because it can help in deciding whether the business has sufficient resources to keep the business running efficiently on a day-to-day basis. There is more about this important new feature in Unit 5.3.

Key terms

Working capital: the difference between total current assets and total current liabilities. The figure (which can be positive or negative) gives some idea of funds available to run the business on a day-to-day basis.

Net current assets: a term often used instead of working capital and calculated in the same way: current assets less current liabilities. When the figure is negative the term used is net current liabilities.

Illustration 8

Presenting a statement of financial position (balance sheet) in vertical format

Here is an example of statement of financial position (balance sheet) using the familiar horizontal format followed by the same statement of financial position (balance sheet) but in vertical form.

Horizontal format

Statement of financial position (balance sheet) at 31 March 2018					
	$	$		$	$
NON-CURRENT ASSETS			CAPITAL		
Motor vehicles	44 500		Opening balance	66 200	
Furniture and equipment	21 200		Add net profit	24 900	
		65 700		91 100	
CURRENT ASSETS			Less drawings	21 400	
Inventory	18 400				69 700
Accounts receivable	11 300		NON-CURRENT LIABILITIES		
Cash in hand	600		Bank loan		15 000
		30 300			
			CURRENT LIABILITIES		
			Accounts payable	7 800	
			Bank overdraft	3 500	
					11 300
		96 000			96 000

Vertical format

Statement of financial position (balance sheet) at 31 March 2018			
	$	$	$
NON-CURRENT ASSETS			
Motor vehicles		44 500	
Furniture and equipment		21 200	
			65 700
CURRENT ASSETS			
Inventory	18 400		
Accounts receivable	11 300		
Cash in hand	600		
		30 300	
Less CURRENT LIABILITIES			
Accounts payable	7 800		
Bank overdraft	3 500		
		11 300	
WORKING CAPITAL			19 000
			84 700
Less NON-CURRENT LIABILITIES			
Bank loan			15 000
			69 700
CAPITAL			
Opening balance		66 200	
Add net profit		24 900	
		91 100	
Less drawings		21 400	
			69 700

Notes:

- Apply the principle used in all vertical formats: the final column is for the most important subtotals and totals: the second-to-last column is used to show how subtotals were obtained; the third column from the right is used to provide detailed supporting information.
- Always start with non-current assets and then record current assets.
- Current liabilities are listed next and the subtotal is deducted from the subtotal of current assets to give the figure for working capital. This subtotal is sometimes instead labelled "net current assets" when positive or "net current liabilities" when negative.
- The next step is to total non-current assets and working capital.
- Then deduct any non-current liabilities and show the first statement of financial position (balance sheet) total.
- The second part of the statement of financial position (balance sheet) consists of the capital section only.

Practice questions

13. Preparing a vertical statement of financial position (balance sheet)

Carl owns a retail business called Island Stores. On 30 June 2018 the business has the following assets and liabilities:

	$
Bank loan (repayable 2021)	13400
Cash in hand	800
Cash at bank	3100
Furniture and equipment	11000
Inventory	7200
Premises	60000
Accounts payable	9600
Accounts receivable	11300

The business's capital account on 30 June 2018 was as follows:

Dr			Capital account				Cr
			$				$
2018				2017			
June	30	Drawings	17 800	May	1	Balance	58 900
	30	Balance c/d	70 400	2018			
				June	30	Net profit	29 300
			88 200				88 200
				July	1	Balance b/d	70 400

Prepare Island Stores' statement of financial position (balance sheet) at 30 June 2018 in vertical form. Identify the business's working capital.

Tip

Don't forget to label net current assets with the label "Working capital".

14. Preparing a vertical statement of financial position (balance sheet)

Justine owns DWB Stores. On 30 September 2018 the business has the following assets and liabilities:

	$
Accounts payable	11 200
Accounts receivable	8 700
Bank loan (repayable December 2018)	2 000
Bank overdraft	2 800
Cash in hand	400
Delivery vehicles	28 900
Furniture and fittings	12 200
Inventory	13 500
Premises	160 000

The business's capital account on 30 September 2018 was as follows:

Dr			Capital account				Cr
			$				$
2018				2017			
Sept	30	Drawings	23 900	Oct	1	Balance	236 900
	30	Net loss	5 300				
	30	Balance c/d	207 700				
			236 900				236 900
				2018			
				Oct	1	Balance b/d	207 700

Prepare DWB Stores' statement of financial position (balance sheet) at 30 September 2018 in vertical form. Identify the business's working capital.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

5.3 The analysis of financial statements – accounting ratios

Objectives

By the end of this unit you will be able to:

- identify a range of ratios that can be used to analyse the performance of a sole trader
- state the formula to be used when calculating each ratio
- calculate ratios based on financial statements of a sole trader.

You know that much hard work goes into preparing accounting records! However, some of this effort could be wasted if financial statements were not used by interested parties – particularly the owners and managers of businesses – to uncover how well or badly the business is performing. In this unit you are going to learn how to calculate the ratios that are used to analyse a business's accounts.

How useful are accounting ratios?

Ratios provide a very valuable means of comparing the performance of a business:

- from one year to the next
- with other similar businesses.

They enable changes in important aspects of a business's performance to be pinpointed and quantified. If ratios are calculated every year, it is possible to see whether any significant trends are becoming apparent.

However, it is not enough just to calculate ratios. Ratios have to be interpreted and this requires skill and judgment if the owner or manager of a business is to be well informed when making important decisions. In the next unit (Unit 5.4), you will learn about what to look for when you have calculated a set of ratios.

Trading account ratios

There are three ratios used to analyse a trading account.

Gross profit percentage	$\frac{\text{Gross profit}}{\text{Revenue}} \times 100$
Mark-up	$\frac{\text{Gross profit}}{\text{Cost of sales}} \times 100$
Rate of inventory turnover	$\frac{\text{Cost of sales}}{\text{Average inventory}} \times 100$

Key terms

Gross profit percentage: gross profit in relation to revenue (measured as a percentage). Sometimes this ratio is expressed as gross profit in relation to turnover. Turnover means revenue – or, to be precise, net revenue (revenue less returns inwards).

Mark-up: gross profit in relation to cost of sales (measured as a percentage).

Rate of inventory turnover: cost of sales divided by average inventory (often expressed as "so many times" in a particular financial period).

Tip

How to calculate an average inventory:

To use the rate of inventory turnover ratio, you first need to work out an average figure for inventory:

Step 1: Add together the figures for the opening inventory ($16 000) and closing inventory ($14 000): $30 000

Step 2: Divide this total by the number of inventory figures you have used in your calculation: 2

Step 3: Calculate the average: $\frac{\$30\,000}{2}$

$= \$15\,000$

Tip

It is possible to work out the rate of inventory turnover in terms of days. In the illustration, average inventory was sold 12 times during the year. This would be the equivalent of every $\frac{365}{12} = 30$ days.

Illustration 9

Calculating trading account ratios

A business's income statement included the following information.

Income statement (trading account) for the year ended 31 December 2018			
	$	$	$
Revenue			240 000
Opening inventory		16 000	
Purchases		178 000	
		194 000	
Closing inventory		14 000	
Cost of sales			180 000
Gross profit			60 000

Gross profit percentage	$\frac{\text{Gross profit}}{\text{Revenue}} \times 100$	$\frac{\$60\,000}{\$240\,000} \times 100$	25%
Mark-up	$\frac{\text{Gross profit}}{\text{Cost of sales}} \times 100$	$\frac{\$60\,000}{\$180\,000} \times 100$	$33\frac{1}{3}\%$
Rate of inventory turnover	$\frac{\text{Cost of sales}}{\text{Average inventory}}$	$\frac{\$180\,000}{\$15\,000}$	12 times

Practice questions

15. Calculating trading account ratios

The following trading account was prepared for the business owned by David McKoy.

David McKoy Income statement (trading account) for the year ended 31 January 2018		
	$	$
Revenue		800 000
Opening inventory	29 000	
Purchases	646 000	
	675 000	
Closing inventory	35 000	
Cost of sales		640 000
Gross profit		160 000

Calculate the following ratios:

a. gross profit percentage
b. mark-up
c. rate of inventory turnover.

In each case, state the formula used.

16. Calculating trading account ratios

The following trading account was prepared for the business owned by Deva Wray.

Deva Wray Income statement (trading account) for the year ended 31 October 2018		
	$	$
Revenue		720 000
Opening inventory	32 500	
Purchases	475 000	
	507 500	
Closing inventory	27 500	
Cost of sales		480 000
Gross profit		240 000

Calculate the following ratios:

a. gross profit percentage
b. mark-up
c. rate of inventory turnover.

In each case, state the formula used.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Profit and loss account ratios

There are two ratios used to analyse a profit and loss account.

Net profit percentage	$\frac{\text{Profit}}{\text{Revenue}} \times 100$
Expense as a percentage of revenue	$\frac{\text{Expense}}{\text{Revenue}} \times 100$

Key terms

Net profit percentage: profit in relation to revenue (measured as a percentage).

Expense as a percentage of revenue: any expense in relation to revenue (measured as a percentage).

Illustration 10

Calculating profit and loss account ratios

A business's total revenue for the year ended 31 December 2018 was $400 000. Its income statement included the following information.

Income statement (profit and loss account) for the year ended 31 December 2018			
	$	$	$
Gross profit			140 000
General expenses		24 000	
Wages		82 000	
			106 000
Net profit			34 000

Net profit percentage	$\frac{\text{Net profit}}{\text{Revenue}} \times 100$	$\frac{\$34\,000}{\$400\,000} \times 100$	8.5 %
Expense as a percentage of revenue	$\frac{\text{General expenses}}{\text{Revenue}} \times 100$	$\frac{\$24\,000}{\$400\,000} \times 100$	6 %
	$\frac{\text{Wages}}{\text{Revenue}} \times 100$	$\frac{\$82\,000}{\$400\,000} \times 100$	20.5 %

Practice questions

17. Calculating profit and loss account ratios

Nisha's profit and loss account was as follows. Her business's revenue for the year ended 31 August 2018 was $360 000.

Nisha Income statement (profit and loss account) for the year ended 31 August 2018		
	$	$
Gross profit		120 000
Office expenses	6 000	
Rent	24 000	
Salaries	42 000	
		72 000
Net profit		48 000

Calculate the following ratios:

a. net profit percentage

b. office expenses as a percentage of revenue

c. rent as a percentage of revenue

d. salaries as a percentage of revenue.

In each case, state the formula used.

18. Calculating profit and loss account ratios

George's profit and loss account was as follows. Revenue for the year ended 31 May 2018 totalled $800 000.

George Income statement (profit and loss account) for the year ended 31 May 2018		
	$	$
Gross profit		240 000
Insurance	12 000	
Loan interest	9 000	
Wages	56 000	
Depreciation	63 000	
		140 000
Net profit		100 000

Calculate the following ratios:

a. net profit percentage
b. wages as a percentage of revenue
c. insurance as a percentage of revenue
d. loan interest as a percentage of revenue
e. depreciation as a percentage of revenue.

In each case, state the formula used.

Statement of financial position (balance sheet) ratios

There are five ratios used to analyse a statement of financial position (balance sheet).

Working capital ratio (current ratio)	Current assets: Current liabilities
Liquid capital ratio (acid test ratio)	Liquid assets: Current liabilities "Liquid assets" means current assets less inventory
Return on capital investment	$\frac{\text{Profit}}{\text{Capital employed (or capital invested)}} \times 100$
Receivables collection period	$\frac{\text{Accounts receivables}}{\text{Credit sales}} \times 365$
Payables payment period	$\frac{\text{Accounts payable}}{\text{Credit purchases}} \times 365$

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key terms

Current ratio: current assets in relation to current liabilities. The ratio is always expressed in the form xx : 1, for example 1.8 : 1. This ratio is sometimes referred to as the "**working capital ratio**".

Acid test ratio: liquid assets in relation to current liabilities. Liquid assets are all of a business's current assets excluding inventories. This ratio is often referred to as the "**liquid capital ratio**" and is also expressed in the form xx : 1.

Key terms

Return on capital investment: the profit made by the business in relation to the funds invested by the owner. The ratio is expressed as a percentage.

Receivables collection period: accounts receivable in relation to credit sales, usually expressed in days.

Payables payment period: accounts payable in relation to credit purchases, usually expressed in days.

Notes:

- Capital employed is the term sometimes used to cover the owner's investment in a business. There are a number of ways of calculating capital employed/owner's investment. It is possible to use the opening capital or the closing capital for the period under review, or perhaps an average of these two figures. Whichever of these options is used, it should be applied each time, to ensure that results are produced in a consistent and comparable way.
- The receivables collection and payables payment periods are usually expressed in days. It is usual to give the answer in whole days and always to round upwards, so a ratio of 30.21 days would become 31 days.
- Usually the total of accounts receivable at the period end is used in this ratio, but opening accounts receivable or average accounts receivable could be used instead. Similarly, the total of accounts payable at the period end is usually used, but the alternatives could also be used.

Illustration 11

Calculating statement of financial position (balance sheet) ratios

A business had credit sales of $372 000 and credit purchases of $300 000 for the year ended 31 December 2018. Its statement of financial position (balance sheet) was as follows.

Statement of financial position (balance sheet) at 31 December 2018			
	$	$	$
NON-CURRENT ASSETS	Cost	Total deprcn	Net
	350 000	125 000	225 000
CURRENT ASSETS			
Inventory	15 000		
Accounts receivable	30 000		
Prepayments	3 000		
Cash at bank	2 000		
		50 000	
CURRENT LIABILITIES			
Accounts payable	26 000		
Accruals	4 000		
		30 000	
WORKING CAPITAL/NET CURRENT ASSETS			20 000
			245 000

CAPITAL			
Opening balance		225 000	
Net profit		60 000	
		285 000	
Drawings		40 000	
			245 000

Current ratio	Current assets : current liabilities	$50 000 : $30 000	1.67 : 1
Acid test ratio	Liquid assets : current liabilities	$35 000 : $30 000	1.17 : 1
Return on investment	$\frac{\text{Net profit}}{\text{Capital employed}} \times 100$	Using opening capital: $\frac{\$60\,000}{\$225\,000} \times 100$	26.67%
		Using closing capital: $\frac{\$60\,000}{\$245\,000} \times 100$	24.49%
		Using average capital: $\frac{\$60\,000}{\$235\,000} \times 100$	25.53%
Receivables collection period	$\frac{\text{Accounts receivables}}{\text{Credit sales}} \times 365$	$\frac{\$30\,000}{\$372\,000} \times 365$	30 days
Payables payment period	$\frac{\text{Accounts payable}}{\text{Credit purchases}} \times 365$	$\frac{\$26\,000}{\$300\,000} \times 365$	32 days

Tip

When you are asked to calculate a ratio, it is a good idea to:

- state the formula
- select the appropriate figures
- calculate the final answer.

Always check that you have given the answer in the right form: xx%, xx times, xx : 1, xx days, etc.

Unless you are told otherwise, work to 2 decimal places for most ratios.

Practice questions

19. Calculating statement of financial position (balance sheet) ratios

The following statement of financial position (balance sheet) was prepared for the business owned by Jackie Davis at the end of its financial year. The business had credit sales of $224 000 and credit purchases of $154 000 for the year ended 31 December 2018.

Jackie Davis Statement of financial position (balance sheet) at 31 December 2018			
	$	$	$
NON-CURRENT ASSETS	Cost	Total deprcn	Net
	490 000	196 000	294 000
CURRENT ASSETS			
Inventory	17 000		
Accounts receivables	16 000		
Prepayments	1 000		
Cash at bank	2 000		
		36 000	
CURRENT LIABILITIES			
Bank loan	7 000		
Accounts payable	14 000		
Accruals	3 000		
		24 000	
WORKING CAPITAL/NET CURRENT ASSETS			12 000
			306 000
CAPITAL			
Opening balance		298 000	
Net profit		45 000	
		343 000	
Drawings		37 000	
			306 000

Calculate the following ratios:

a. current ratio
b. acid test ratio
c. return on investment
d. receivables collection period
e. payables payment period.

In each case, state the formula used.

20. Calculating statement of financial position (balance sheet) ratios

The following statement of financial position (balance sheet) was prepared for the business owned by Rudy Cousins at the end of its financial year. The business had credit sales of $72 000 and credit purchases of $429 000 for the year ended 30 June 2018.

Rudy Cousins Statement of financial position (balance sheet) at 30 June 2018			
	$	$	$
NON-CURRENT ASSETS	Cost	Total deprcn	Net
	860 000	215 000	645 000
CURRENT ASSETS			
Inventory	54 000		
Accounts receivables	8 000		
Prepayments	2 000		
Cash at bank	8 000		
		72 000	
CURRENT LIABILITIES			
Accounts payable	39 000		
Accruals	1 000		
		40 000	
WORKING CAPITAL/NET CURRENT ASSETS			32 000
			677 000
CAPITAL			
Opening balance		661 000	
Net profit		75 000	
		736 000	
Drawings		59 000	
			677 000

Calculate the following ratios:

a. current ratio
b. acid test ratio
c. return on investment
d. receivables collection period
e. payables payment period.

In each case, state the formula used.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

5.4 Reporting on performance

Objectives

By the end of this unit you will be able to:

- explain what accounting ratios can tell you about a business's performance
- make judgments about the strengths and weaknesses of a business's performance
- make recommendations that will enable a business's performance to improve.

Key terms

Liquidity: a measure of performance highlighting a business's ability to pay its day-to-day commitments.

Efficiency: a measure of performance highlighting a business's use of its resources.

What indicates a good performance?

You are now able to calculate some important ratios. These ratios can be used to analyse how well or badly a business has been performing and to provide a basis for helping business owners and managers to make improvements. It is usual to consider three important matters when reporting on performance:

- **Profitability**: are the owners and managers of a business successful in increasing the business's value over time through trading or providing services?
- **Liquidity**: are the business's resources well managed so that the business can pay its debts, including running costs, without difficulty from one week to the next, and also provide the owner with a reasonable income?
- **Efficiency**: are the owners and managers of the business controlling key resources so that the maximum benefit is derived from the money tied up in them?

Businesses can fail if their owners or managers do not give these issues enough attention. There are many cases, for example, of profitable businesses that have not survived because their liquidity has been inadequate.

Profitability ratios

What do the gross profit percentage and mark-up tell you about a business's performance?

Gross profit percentage tells you:

- how much profit is being made in relation to revenue
- how much gross profit (in cents) is being made for every $1 of revenue.

Mark-up tells you:

- how much gross profit is being made in relation to cost of sales
- how much gross profit (in cents) is being made for every $1 of cost of sales.

In general, an increase in the percentage is likely to be good news, because the business will be making more gross profit on each item sold. On the other hand, a decrease could be potentially bad news for the business, because less profit would be made on each item sold.

If you have information about the performance of similar businesses providing the same goods you could comment on whether:

- the selling price is out of step with these similar businesses
- the business is paying too much or too little for the goods it sells.

If you have information about a business covering a number of trading periods you could compare results from one period to the next to see if a trend emerges.

What do the net profit percentage and expense-to-revenue ratios tell you about a business's performance?

Net profit percentage tells you:

- how much profit is being made in relation to revenue
- how much profit (in cents) is being made for every $1 of revenue.

Expense/revenue ratio tells you:

- how much is being spent on a particular expense in relation to revenue.

In general, an increase in the net profit percentage is good news for a business, because it means that the business is making more profit on each item sold. Conversely, a decrease would be bad news for the business.

If you have information about other similar businesses or results for the business for previous years, you can make comparisons and see if a favourable or unfavourable trend is developing.

What does the return on investment (return on capital employed) ratio tell you about a business's performance?

Return on investment ratio tells you:

- about profit in relation to the owner's investment in the business
- how much profit (in cents) is made for every $1 of capital invested.

An increase in the percentage is usually good news, because it means the business is making more profit for every $1 of resources (or capital) invested in the business. A decrease, of course, would be bad news.

If you have information about other similar businesses, you should be able to judge whether the resources (capital invested) are being used effectively or not. If you have information about one business

Tip

Sometimes businesses deliberately alter their gross profit percentage. There could be a variety of reasons behind any changes in the percentage: the need to face up to increasing competition, problems with the supplies of goods which are to be sold, the business aiming to go "up-market" or "down-market", etc.

Tip

When the net profit percentage is changing, this could be due to a variety of reasons. For example, the business could be making more (or less) gross profit than previously, or it could be controlling costs more (or less) effectively.

Tip

It might also be possible to consider how well the owner of the business might do if the capital was invested and earning interest, and if the owner was in employment earning a salary. Of course, in making such a comparison it would be important to bear in mind how risky it is to own a business, and how relatively safe it is to invest in some form of savings account.

for several financial periods, you can see if there is a favourable or unfavourable trend developing.

How can a business improve its profitability?

You may be asked to make some recommendations about how a business could improve its profitability. Here are just a few ideas which may help you with this task:

- improving sales: for example, reviewing pricing policy to make the business more competitive; considering the quality or range of the products sold; reviewing marketing strategies
- reducing costs: for example, reducing wastage; finding cheaper suppliers of goods and other services
- making the best use of resources: for example, whether the business has the right assets to achieve the desired level of profit; whether any of the assets are being underused.

Practice questions

21. Commenting on profitability ratios

The following ratios have been calculated as a result of analysing the end-of-year financial statements of Horizon Stores, a business owned by Robin Spencer.

	For the year ended 31 December		
	2016	2017	2018
Gross profit percentage	40%	38%	37%
Mark-up	67%	61%	59%
Net profit percentage	14%	13%	11%
Wages/revenue	8%	9%	10%
Other expenses/revenue	3%	4%	5%
Return on investment (capital employed)	12%	11%	10%

Sales figures for each of these years are as follows.

2016	$600 000
2017	$580 000
2018	$570 000

Comment on the trend in sales and on the business's profitability during the three-year period. For each ratio, describe the trend and state whether this is a strength or a weakness.

22. Commenting on profitability ratios

The following ratios have been calculated as a result of analysing the end-of-year financial statements of the retail business owned by Victorine Morris.

	For the year ended 31 December		
	2016	2017	2018
Gross profit percentage	20%	23%	26%
Mark-up	25%	30%	35%
Net profit percentage	9%	10%	12%
Salaries/revenue	7%	6%	5%
General expenses/revenue	4%	5%	6%
Return on investment (capital employed)	13%	15%	16%

Sales figures for each of these years are as follows.

2016	$700 000
2017	$730 000
2018	$780 000

Comment on the trend in sales and the business's profitability during the three-year period. For each ratio, describe the trend and state whether this is a strength or a weakness.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Liquidity ratios

What do the current and acid test ratios tell you about a business's ability to meet its everyday commitments?

The current ratio measures:	The acid test ratio measures:
• current assets in relation to current liabilities • the funds the business has available to pay the short-term debts of the business.	• liquid assets (current assets excluding inventories) to current liabilities • the amount of liquid assets available to pay the short-term debts of the business.

The difference between these two ratios is one of timing. The current ratio looks further ahead than the liquidity ratio. Liquid capital is a more immediate measure of liquidity, hence the term "acid test" ratio.

An increase in these ratios is usually a favourable development for a business because it means that the business will find it easier to find the resources to make payments on time. A decrease would therefore be an unfavourable development.

So how do you know if a business is doing well or not?

When commenting on liquidity ratios, it is important to know about the typical ratios for the type of business you are looking at. Levels of liquidity vary considerably depending on the goods or services the business provides. For example, think about your local food retailer, where most of the goods will be sold within a short space of time and where cash sales will dominate. This situation is very different to, say, a

Tip

Short-term debts of the business include all the items on which the business will need to use cash resources in the near future: all the payments to which the business is committed for the next few weeks and months. These could include:

- accounts payable
- most expenses
- loan repayments
- owner's drawings
- payment of taxes
- purchases of new non-current assets.

furniture store, where much of the inventory is slow moving and where credit sales are far more likely. So, the food retailer will have relatively small liquidity requirements, but the furniture retailer will have considerable liquidity requirements.

How can a business improve its liquidity?

If you are asked to recommend how a business could improve its liquidity, the following ideas may be helpful:

- increasing profit: for example, increasing sales but also keeping control of costs, resulting in increased cash flowing into the business. This may not be immediate, of course, because the business will have to wait for accounts receivable to pay
- reducing drawings: if the owner can take less cash from the business, this will have a positive impact on liquidity. However, the owner's personal commitments may not make this possible
- increasing non-current liabilities: arranging a long-term loan would instantly boost liquidity. However, loans have to be repaid and interest charges could be high and would, of course, reduce profits
- delaying expenditure on non-current assets: the owner of the business could delay plans to replace or increase non-current assets. This would mean that cash is retained within the business which would otherwise be spent. However, the delay could have a negative impact on the quality of the business's operations.

Practice questions

23. Commenting on liquidity ratios

The following ratios have been calculated as a result of analysing the end-of-year financial statements of Horizon Stores, a business owned by Robin Spencer (see also Question 21).

	For the year ended 31 December		
	2016	2017	2018
Current ratio	1.7 : 1	1.6 : 1	1.5 : 1
Acid test ratio	0.9 : 1	0.8 : 1	0.7 : 1

The typical ratios for this type of business are as follows.

Current ratio	1.8 : 1
Acid test ratio	0.8 : 1

Comment on the business's liquidity during the three-year period. For each ratio, describe the trend and state whether this is a strength or a weakness or represents a mixed position.

Tip

It is possible for a business to have too much working and liquid capital. In these situations, the business could have too much money tied up in current or liquid assets that are not being used effectively.

24. Commenting on liquidity ratios

The following ratios have been calculated as a result of analysing the end-of-year financial statements of the retail business owned by Victorine Morris (see also Question 22).

	For the year ended 31 December		
	2016	2017	2018
Current ratio	1.1 : 1	1.2 : 1	1.4 : 1
Acid test ratio	0.4 : 1	0.5 : 1	0.6 : 1

The typical ratios for this type of business are as follows:

Current ratio	1.2 : 1
Acid test ratio	0.9 : 1

Comment on the business's liquidity during the three-year period. For each ratio, describe the trend and state whether this is a strength or a weakness or represents a mixed position.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Efficiency ratio

What does inventory turnover tell you about the business's efficiency?

Inventory turnover tells you:

- how quickly inventory is being sold
- how many days (or weeks or months) it takes to sell the average inventory.

In general, an increase in the rate of inventory turnover is a strength for a business, because it means inventory is being sold more quickly; every time an item is sold, some profit will be made.

As with all ratios, knowing the average for other similar businesses can help you interpret how well a business is doing.

What do the receivables collection period and payables payment period tell you about the business's efficiency?

The receivables collection period tells you:

- how many days on average a credit customer takes to pay.

The payables payment period tells you:

- how many days on average it takes to pay a credit supplier.

Generally, the more quickly customers pay the better. It is a particular strength if customers are paying a business more quickly than the business is paying its payables, because the flow of cash through the business will be improved. Normally, the longer it takes to pay payables the better but, of course, it is important not to upset suppliers by delaying too long.

Practice questions

25. Commenting on efficiency ratios

The following ratios have been calculated as a result of analysing the end-of-year financial statements of Horizon Stores, a business owned by Robin Spencer (see also Questions 21 and 23).

	For the year ended 31 December		
	2016	2017	2018
Rate of inventory turnover	9 times	10 times	12 times
Receivables collection period	26 days	30 days	35 days
Payables payment period	32 days	31 days	27 days

The typical ratios for this type of business are as follows:

Rate of inventory turnover	12 times
Receivables collection period	30 days
Payables payment period	30 days

Comment on the business's efficiency ratios during the three-year period. For each ratio:

- describe the trend and state whether this is a strength or a weakness or represents a mixed position
- explain what the trend means for the business.

26. Commenting on efficiency ratios

The following ratios have been calculated as a result of analysing the end-of-year financial statements of the retail business owned by Victorine Morris (see also Questions 22 and 24).

	For the year ended 31 December		
	2016	2017	2018
Rate of inventory turnover	18 times	15 times	14 times
Receivables collection period	37 days	36 days	35 days
Payables payment period	27 days	28 days	30 days

The typical ratios for this type of business are as follows:

Rate of inventory turnover	18 times
Receivables collection period	30 days
Payables payment period	30 days

Comment on the business's efficiency ratios during the three-year period. For each ratio:

- describe the trend and state whether this is a strength or a weakness or represents a mixed position
- explain what the trend means for the business.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

How to write a simple report on a business's performance

When you write about a business's performance, a sensible approach is to take the following steps:

Step 1: Look at the trend in sales. Is it upward or downward? Often the trend in sales figures is the most important key to understanding all the other aspects of a business's performance.

Step 2: What has happened to each of the other ratios? Look at profitability, liquidity and efficiency as separate categories. What trend emerges in each case? Is the overall picture one of improving or declining ratios – or is the picture more mixed?

Step 3: Make it clear what are strengths for the business and what are weaknesses.

Step 4: Overall, do you feel the business is improving? Make suggestions as to how the business could improve its performance by recommending actions that would help overcome any weaknesses.

Illustration 12

Reporting on a business's performance

Here is an example of how to write a simple report on a business's performance following the approach set out above.

Laura Edwards has been looking at her business's end-of-year financial statements for each of the years ended 31 December 2017 and 2018. She has worked out the following accounting ratios based on these statements.

	2017	2018
Gross profit percentage	35%	37%
Mark-up	54%	58%
Net profit percentage	18%	16%
Operating expenses/revenue	17%	21%
Return on investment	12%	15%
Current ratio	1.6 : 1	1.4 : 1
Acid test ratio	0.7 : 1	0.9 : 1
Inventory turnover	13 times	11 times
Receivables collection period	35 days	31 days
Payables payment period	27 days	32 days

The following information is available about sales in each of the years ended 31 December.

2017	$440 000
2018	$500 000

Typical liquidity ratios for this type of business are as follows.

Current ratio	1.7 : 1
Acid test ratio	0.9 : 1

Here are the main points to be made in a report based on this information following the step-by-step approach outlined above.

Step 1: Look at the trend in sales.

There has been a substantial increase in sales ($60 000) – a 14% increase comparing 2018 with 2017. This is very good news for this business.

Steps 2 and 3: Look at each ratio in the three categories (profitability, liquidity and efficiency). What is happening and is it a strength or a weakness?

Category	Strengths	Weakness
Profitability	• The gross profit percentage has increased (+2%), meaning that the business is making more gross profit per $1 of sales. • The return on investment has also increased by 3%, meaning that the business is making more profit per $1 of capital invested by the owner.	• The net profit percentage has fallen by 2% and the operating expenses/revenue percentage has increased by 4%.
Liquidity	• The acid test ratio has increased and is now near to the average for this type of business. This means that the business will be in a better position to pay its more immediate short-term debts.	• The current ratio has decreased and has moved further away from the average for this type of business. This means that the business will have more difficulty in paying short-term debts.
Efficiency	• The payables payment period has increased slightly (+5 days) and is now longer than the receivables collection period. This change will improve cash flow. • The receivables collection period has decreased slightly (–4 days). This means that money is being collected more quickly from customers. This should improve cash flow.	• The rate of inventory turnover has decreased (from 13 to 11 times), so average inventory is being sold less quickly.

Step 4: Look at the overall picture. What could the owner do to improve performance?

Summary and recommendations

Overall, the business's performance has improved in 2018 compared with 2017. The owner has improved the sales and this has led to a better return on the capital invested in the business. There has been some improvement in liquidity. However, there are some weaknesses.

To improve the business's performance, the owner should aim to:

- control operating expenses more effectively, possibly by reducing waste or finding ways of paying less for some of the costs so that net profit percentage increases

- reduce the amount of money tied up in inventories, but without reducing choice or quality for customers, as this could have a negative effect on sales
- improve the working capital position to ensure that liquidity problems do not arise – for example, perhaps Laura could reduce her drawings.

Practice questions

27. Reporting on performance

Navin has been looking at his business's end-of-year financial statements for each of the years ended 31 December 2017 and 2018. He has worked out the following accounting ratios based on these statements.

	2017	2018
Gross profit percentage	40%	43%
Mark-up	67%	75%
Net profit percentage	8%	7%
Operating expenses/revenue	28%	31%
Return on investment	11%	7%
Current ratio	1.2 : 1	1.3 : 1
Acid test ratio	0.8 : 1	0.6 : 1
Inventory turnover	9 times	10 times
Receivables collection period	29 days	35 days
Payables payment period	36 days	30 days

The following information is available about sales in each of the years ended 31 December.

2017	$200 000
2018	$180 000

Typical liquidity ratios for this type of business are as follows.

Current ratio	1:3 : 1
Acid test ratio	0.8 : 1

Prepare a simple report on this business's performance. Make some recommendations on how any weaknesses could be overcome.

28. Reporting on performance

Tamara King has been looking at her business's end-of-year financial statements for each of the years ended 31 December 2017 and 2018. She has worked out the following accounting ratios based on these statements.

	2017	2018
Gross profit percentage	27%	26%
Mark-up	37%	35%
Net profit percentage	10%	9%
Operating expenses/revenue	17%	17%
Return on investment	11%	12%
Current ratio	1.1 : 1	1.4 : 1
Acid test ratio	0.9 : 1	0.8 : 1
Inventory turnover	11 times	10 times
Receivables collection period	38 days	31 days
Payments payment period	37 days	30 days

The following information is available about sales in each of the years ended 31 December.

2017	$320 000
2018	$360 000

Typical liquidity ratios for this type of business are as follows.

Current ratio	1:2 : 1
Acid test ratio	0.8 : 1

Prepare a simple report on this business's performance. Make some recommendations on how any weaknesses could be overcome.

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. The following information has been extracted from the books of a furniture shop for a financial period:

	$
Revenue	400 000
Closing inventory	40 000
Carriage on sales	20 000
Opening inventory	60 000
Purchases	300 000

What is the gross profit for the shop for the financial period?

A $120 000
B $100 000
C $80 000
D $60 000

2. The following figures have been extracted from a business's trading account:

	$
Purchases	400 000
Revenue	600 000
Opening inventory	60 000
Closing inventory	20 000

What is the cost of sales?

A $360 000
B $440 000
C $480 000
D $560 000

3. Assuming that there are no other relevant accounts, which of the following will give an accurate calculation of costs of sales?

A Purchases plus opening inventory less returns outwards less closing inventory
B Purchases less returns outwards plus closing inventory less opening inventory
C Purchases plus opening inventory less returns inwards less closing inventory
D Purchases plus returns inwards plus closing inventory less opening inventory

4. Which of the following current assets is not required when calculating the acid test ratio?

A Cash in hand
B Cash at bank
C Accounts receivable
D Inventory

5. The expression $\frac{\text{Profit} \times 100}{\text{Capital employed}}$ is a measure of:

A profitability
B investment
C liquidity
D efficiency

6. Working capital is defined as:

A capital less current liabilities
B non-current assets less current liabilities
C current assets less current liabilities
D total assets less current liabilities

7. The following figures were taken from a business's trading account:

	$
Revenue	600 000
Expenses	40 000
Gross profit	370 000
Capital	1 000 000
Cost of sales	230 000

What is the percentage of profit to capital invested?

A 23%
B 33%
C 37%
D 60%

8. During a year, a business sold goods that had cost $720 000. The inventory held at the beginning of the year was $60 000 and at the end $100 000.
   What was the annual rate of inventory turnover?
   A 12 times
   B 9 times
   C 7.2 times
   D 4.5 times

9. Quinlan had the following assets and liabilities:

	$
Motor vehicles	21 000
Office fixtures	16 000
Inventory	8 000
Accounts receivable	9 000
Accounts payable	7 500
Bank loan (2 years)	20 000
Cash	14 500

   What was his liquid capital ratio?
   A 2.27 : 1
   B 3 : 1
   C 3.13 : 1
   D 4.2 : 1

10. What is a business's mark-up?
    A Gross profit expressed as a percentage of cost of sales
    B Gross profit expressed as a percentage of the revenue
    C Net profit expressed as a percentage of the cost of sales
    D Net profit expressed as a percentage of the revenue

11. The following information is available from the books of a trader for one month:

	$
Opening inventory	32 000
Closing inventory	20 000
Purchases	228 000

    A rate of mark-up of 10% is used.
    What is the gross profit for the month?
    A $20 800
    B $21 600
    C $22 800
    D $24 000

PAPER 2

Case study 1: Azure Stores

This case study requires the preparation of end-of-year financial statements and using the results to prepare a report on the business's performance based on a comparison of the main accounting ratios.

Part A

Azure Stores is owned by Bradley Morris. The business's financial year ended on 31 December 2018 and the following trial balance was extracted from the books of account on that date.

Trial balance at 31 December 2018

	Dr $	Cr $
Accounts payable		64 700
Accounts receivable	42 800	
Capital		451 000
Cash at bank	13 800	
Drawings	62 300	
Inventory, 1 January 2018	38 900	
Non-current assets	768 000	
Operating expenses	382 300	
Purchases	513 600	
Revenue		1 306 000
	1 821 700	1 821 700

Additional information at 31 December 2018: inventory was valued at $42 650.

Prepare an income statement (trading and profit and loss account) for the year ended 31 December 2018 and a statement of financial position (balance sheet) at that date.

Part B

Bradley has been able to provide the following ratios for the year ended 31 December 2017.

Gross profit percentage	59%
Mark-up	116%
Net profit percentage	13%
Operating expenses/revenue	28%
Return on investment (based on opening capital)	32%
Working capital ratio	1.3 : 1
Liquid capital ratio	0.7 : 1
Rate of inventory turnover	14 times
Receivables collection period	30 days
Payables payment period	30 days

Notes:

- Total sales for the year ended 31 December 2018 were $1 385 000.
- Bradley has stated that all purchases and 50% of sales were on credit.
- For this type of business, the average working capital ratio is 1.5 : 1 and the average acid test ratio is 0.8 : 1

Calculate the equivalent figures for each of these ratios for the year ended 31 December 2018 based on the end-of-year financial statements.

Prepare a report comparing the performance of the business for the year ended 31 December 2018 and the year ended 31 December 2017.

Case study 2: Marlin Wholesale

This case study requires the preparation of end-of-year financial statements and using the results to prepare a report on the business's performance based on a comparison of the main accounting ratios.

Part A

Marlin Wholesale is owned by Leela Wright. Her business's financial year ended on 30 September 2018. The following trial balance was produced on that date.

Trial balance at 30 September 2018

	Dr $000	Cr $000
Accounts payable		116
Accounts receivable	163	
Bank overdraft		31
Capital		575
Carriage inwards	9	
Drawings	69	
Inventory, 1 October 2017	148	
Non-current assets:	960	
Operating expenses	185	
Purchases	1 250	
Returns	17	28
Revenue		2 051
	2 801	2 801

Additional information at 30 September 2018 (in $000): inventory was valued at $151.

Prepare an income statement for the year ended 30 September 2018 and a statement of financial position (balance sheet) at that date.

Part B

Leela has been able to provide the following ratios for the year ended 30 September 2017.

Gross profit percentage	39%
Mark-up	64%
Net profit percentage	14%
Operating expenses/revenue	10%
Return on investment	52%
Working capital ratio	1.6 : 1
Liquid capital ratio	0.9 : 1
Rate of inventory turnover	7 times
Receivables collection period	30 days
Payables payment period	30 days

Notes:

- Total sales for the year ended 30 September 2018 were $1 896 000.
- Leela has stated that all purchases and 90% of sales were on credit.
- For this type of business, the average working capital ratio is 1.4 : 1 and the acid test ratio is 0.7 : 1

Calculate the equivalent figures for each of these ratios for the year ended 30 September 2018 based on the end-of-year financial statements.

Prepare a report comparing the performance of the business for the year ended 30 September 2018 and the year ended 30 September 2017.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

6 Accounting adjustments

Setting the scene

You are now familiar with preparing a sole trader's income statement (trading and profit and loss account) transferring information from ledger accounts or using details summarised in a trial balance. In this chapter you will develop your knowledge and skills even further and learn how to ensure that the net profit (or net loss) for a financial period accurately reflects the business's performance during that financial period. There are certain rules (often called accounting concepts) which must be applied when preparing financial statements to ensure that the owner of a business, the manager, or other users, are not misled into thinking the business is doing better than is really the case. In addition, there will be a focus on service businesses and on the distinction between revenue and capital expenditure.

Syllabus coverage

	Syllabus	Unit
1	Explain accounting concepts that underpin the need for adjustments	6.1
2	Explain why adjustments are made to financial statements	
3	Prepare journal entries and ledger accounts to reflect adjustments and the treatment in the statement of financial position (balance sheet)	
4	Explain the reasons for bad debts	6.3
5	Prepare journal entries and ledger accounts to write off bad debts and create provision for doubtful debts	
6	Indicate the treatment of bad and doubtful debts in the income statement and statement of financial position (balance sheet)	
7	Discuss the nature of depreciation	6.2
8	Calculate annual depreciation expenses using both the straight-line method and reducing-balance method	
9	Prepare journal entries and ledger accounts for provision for depreciation	
10	Distinguish between capital expenditure and revenue expenditure	6.5
11	Determine the amount of expenses or revenues to be transferred to the income statement	6.1–6.4
12	Prepare income statements reflecting adjusting entries	
13	Prepare financial statements after adjustments	

6.1 Adjusting expenses and income

Objectives

By the end of this unit you will be able to:

- explain the concepts that are applied when expenses and income are adjusted
- explain the reasons for adjustments
- record prepaid expenses and advanced revenues and accrued expenses and revenues.

The purpose of accounting concepts

Accounting techniques and procedures can often seem very clear cut, leaving no room for disagreement or uncertainty. However, businesses can be very complex organizations and, as you know, keeping the accounting records for even a very small business can involve recording countless transactions and making many important decisions. As a result, there can be occasions when an accountant or bookkeeper can be faced with real difficulties in making the right decision about what to do.

So accounting concepts have the following benefits:

- they ensure that everyone treats particular situations in the same way
- they provide guidelines for the treatment of new or unfamiliar accounting problems
- they enable anyone using accounting statements to be confident that the information provided would have been very similar, whoever had prepared them.

Key terms

Accrual: an amount owed by a business for an expense.

Accruals concept: in order to calculate profit, income for a financial period is matched exactly with expenses that relate to that accounting period, whether paid or not. (This concept is sometimes called the "matching concept".)

Accounting concepts and the income statement

There are three important concepts which affect the way in which income statements are prepared.

The accruals concept

The **accruals concept** is the idea that profits (or losses) should be based on a specific time period (usually a year) and be based on taking the income for the year and matching this with all the costs that were necessary to achieve that income. This rule is therefore often called the "matching concept".

What follows from this rule is that in putting together an annual income statement great care has to be taken to ensure every entry relates to the year in question, not to some other accounting period, and that every entry presents a full picture for that year.

The prudence concept

Accountants are keen that financial statements should not mislead users into thinking that a business is doing better than is really the case. The **prudence concept** helps in situations where there is some doubt about the value of an asset or the amount of profit being made, by ensuring that in those cases the lower value for an asset or profit is reported.

The consistency concept

The owners of businesses have choices to make when preparing accounting records. Having made a decision, the **consistency concept** requires that the business keeps to that decision from one year to another. This ensures that financial statements are prepared on the same basis each year. As a result, those comparing results can be sure that their comparisons will be valid.

Key terms

Prudence concept: where there is doubt, asset and profit values should be under- rather than overstated.

Consistency concept: the rule that accounting policies should be carried out in the same way year on year.

Why are expenses adjusted?

The rule when preparing an income statement is that it is important to ensure that any expense item represents the amount of that expense for that year – whether paid or not. As a result, some expenses need adjusting at the year end because there is an amount due but unpaid when the financial statements are prepared. The amount entered into the income statement (trading and profit and loss account) is the amount that has been incurred during the year, even if it has not all been paid for. The amount due but unpaid is referred to as an accrual. This is an application of the accruals concept.

Illustration 1

Recording an accrual

Renea is preparing her business's income statement on 31 December 2018. Her electricity account at this date is as follows.

Dr		Electricity		Cr
		$		$
Jan to Dec	Bank (payments made during the year)	22 000		

The account shows that so far $22 000 has been paid for electricity and this is the figure that should appear in the end-of-year trial balance.

However, Renea has received an invoice for electricity for $1 000 for the last week of the year.

The electricity charge for the year is $23 000 ($22 000 + accrual of $1 000).

Notes:

- Start by making sure you transfer the correct amount to the profit and loss section of the income statement ($23 000) and prepare a journal entry to record the transfer in the correct book of original entry.
- Record the unpaid invoice of $1 000 as a balance on the account.
- The balance brought down is a credit balance, because accruals are current liabilities.

The figure that should appear in the profit and loss section of the income statement is the full amount for the year, whether paid or not: $23 000.

This is how the electricity account will appear.

Dr **Electricity** **Cr**

			$				$
Jan to Dec		Bank (payments made during the year)	22 000	Dec	31	Income statement	23 000
Dec	31	Balance c/d	1 000				
			23 000				23 000
				Jan	1	Balance b/d	1 000

You will remember from Chapter 4 that this transfer to the income statement should appear first as a journal entry as follows:

Journal

		Dr	Cr
		$	$
Dec 31	Income statement (trading and profit and loss account)	23 000	
	Electricity		23 000
	Transfer of total electricity charges for the year		

Practice questions

1. Recording expense accruals

A business's trial balance includes the following information about expenses paid during the year ended 30 June 2018:

	$
Electricity	7 900
General expenses	11 800

The owner of the business provides the following additional information about expense accruals at 30 June 2018:

- An invoice for electricity, $700, is due but unpaid.
- General expenses, $300, relating to the year ended 30 June 2018, remain unpaid.

Prepare the following ledger accounts recording this information:

a. electricity

b. general expenses.

The accounts should be balanced and the balances brought down.

2. Recording expense accruals

A business's trial balance includes the following information about expenses paid during the year ended 31 March 2018:

	$
Administration expenses	15 500
Salaries	109 600

The owner of the business provides the following additional information about expense accruals at 31 March 2018:

- Administration expenses, $900, remain unpaid.
- Salaries, $3 200, are due but unpaid.

Prepare the following ledger accounts recording this information:

a. administration expenses

b. salaries.

The accounts should be balanced and the balances brought down.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

It is just as likely that, in the case of some expenses, payments will have been made that cover the business beyond the current account period. In this situation, the business has made what is called a prepayment. The same principle applies: charge exactly this year's expense charge to the income statement (trading and profit and loss account).

Illustration 2

Recording a prepayment

Renea reports that this year she has paid $38 000 for insurance. Here is the insurance account in the general ledger.

Dr			Insurance	Cr	
			$		$
Jan to Dec	Bank (payments made during the year)		38 000		

However, this sum includes insurance for the first two months of the next accounting period, $2 000.

The annual charge for insurance is $36 000 ($38 000 – $2 000).

So, it is $36 000 which should be charged to the income statement (trading and profit and loss account). The remaining $2 000 is regarded as a current asset as, just like any asset, it represents money spent from which the benefit is still to come.

The insurance account will appear as follows.

Notes:

- As before, start by making sure you transfer the correct amount to the income statement (trading and profit and loss account) ($36 000).
- Record the prepayment of $2 000 as the balance to carry down on the account.
- The balance brought down is a debit balance because it is a current asset.

Dr			Insurance				Cr
			$				$
Jan to Dec		Bank (payments made during the year)	38 000	Dec	31	Income statement	36 000
					31	Balance c/d	2 000
			38 000				38 000
Jan	1	Balance b/d	2 000				

The transfer to the income statement should appear first as a journal entry as follows:

Journal			
		Dr	Cr
		$	$
Dec 31	Income statement (trading and profit and loss account	36 000	
	Insurance		36 000
	Transfer of total insurance charges for the year		

Practice questions

3. Recording expense prepayments

A business's trial balance includes the following information about expenses paid during the year ended 31 August 2018:

	$
Insurance	9 100
Rent	27 600

The owner of the business provides the following additional information about expense prepayments at 31 August 2018:

- The payments for insurance include $800 relating to the following year.
- Rent, $1 200, is prepaid.

a. Prepare journal entries to record the transfer of insurance and rent to the income statement on 31 August 2018.

b. Prepare the following ledger accounts recording this information:

(i) insurance

(ii) rent.

The accounts should be balanced and the balances brought down.

4. Recording expense prepayments

A business's trial balance includes the following information about expenses paid during the year ended 28 February 2018:

	$
Electricity	14400
Selling expenses	19500

The owner of the business provides the following additional information about expense prepayments at 28 February 2018:

- The payments for electricity include $500 relating to the following year.
- Selling expenses, $700, are prepaid.

a. Prepare journal entries to record the transfer of electricity and selling expenses to the income statement on 28 February 2018.

b. Prepare the following ledger accounts recording this information:

(i) electricity

(ii) selling expenses.

The accounts should be balanced and the balances brought down.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

Adjusting income

Sometimes a business will earn income in addition to sales. For example, if a business owns its own property it could sublet some unused space and receive rent from the tenant – this would be called "rent received". If a business puts surplus money into a savings or investment account it could earn interest – "interest received".

Any incidental items of income such as interest received and rent received – often referred to as revenues – are shown in the profit and loss section of the income statement, rather than in the trading section.

It is quite likely, taking the example of rent received, that the tenant could owe money to the business at the financial year end, or could have paid ahead for part of the next financial period. Where these situations arise, it will be necessary to make adjustments in the accounts.

Illustration 3

Adjusting income for income due

Omare is preparing his business's income statement (trading and profit and loss account) at 31 December 2018. The business sublets part of its premises to another business and receives rent. Here is the rent received account on 31 December 2018.

Notes:

- The account shows that the tenant has paid $15 000 in rent so far.
- As this is a gain for the business, the account has been credited (and the bank account debited) with the amount received.
- Rent received should appear as a credit balance on the trial balance prepared before the end-of-year financial statements are drafted.

Dr	Rent received			Cr
	$			$
		Jan to Dec	Bank (payments made during the year)	15 000

Suppose that the tenant had failed to pay $1 000 in rent for the last few weeks of the year. In this case, the amount transferred to the income statement (trading and profit and loss account) should be $16 000 ($15 000 paid + amount due $1 000).

Here is the updated rent received account.

Dr				Rent received				Cr
			$					$
Dec	31	Income statement	16 000		Jan to Dec	Bank (payments made during the year)		15 000
					Dec	31 Balance	c/d	1 000
			16 000					16 000
Jan	1	Balance	b/d 1 000					

Notes:

- As before, start by recording the correct amount to be transferred to the profit and loss section of the income statement (that is, $16 000).
- Balance the account, recording the amount due from tenant.
- The balance will appear as a debit balance when brought down.
- The balance brought down is a current asset. This is because the business is owed money.

The transfer to the income statement should appear first as a journal entry as follows:

Journal			
		Dr	Cr
		$	$
Dec 31	Rent received	16 000	
	Income statement (trading and profit and loss account)		16 000
	Transfer of total rent received for the year		

Illustration 4

Adjusting for advanced income (income received in advance)

Here is another example where a business is receiving rent from a tenant. However, this time the tenant has paid more than is necessary for the year under review by sending money to cover the first weeks of the next accounting period.

Dr	Rent received			Cr
	$			$
		Jan to Dec	Bank (payments made during the year)	8 500

Suppose that the tenant has paid $700 for rent for the first few weeks of 2019. The amount that should be transferred to the income statement (trading and profit and loss account) is $7 800 ($8 500 less amount received in advance, $700).

Here is the updated rent received account.

Dr				Rent received					Cr
			$						$
Dec	31	Profit and loss		7 800	Jan to Dec		Bank (payments made during the year)		8 500
	31	Balance	c/d	700					
				8 500					8 500
					Jan	1	Balance	b/d	700

The transfer to the income statement should appear first as a journal entry as follows:

Journal			
		Dr	Cr
		$	$
Dec 31	Rent received	7 800	
	Income statement (trading and profit and loss account)		7 800
	Transfer of total rent received for the year		

Notes:

- As usual, start by recording the correct amount to be transferred to the income statement (trading and profit and loss account) ($7 800).
- Balance the account, recording the amount received in advance from the tenant.
- The balance will appear as a credit balance when brought down, because it is a current liability. This is because in a sense the business owes the tenant the money that has been received ahead of the year to which it relates.

Practice questions

5. Recording adjustments to income accounts

A business obtains income from subletting part of its premises and from interest on an investment.

During the year ended 30 November 2018 the business received the following amounts:

	$
Rent received	22 400
Loan interest received	7 300

At 30 November 2018, the business has received rent, $600, in advance, but is owed interest of $200.

a. Prepare journal entries to record the transfer of rent received and loan interest received to the income statement on 30 November 2018.
b. Prepare the following ledger accounts recording this information:
   (i) rent received
   (ii) loan interest received.

The accounts should be balanced and the balances brought down.

6. Recording adjustments to income accounts

A business sublets some unused space to two tenants.

The following information is available about the year ended 31 December 2018.

Tenant 1:

	$
Rent received during the year	16 200
Rent due but unpaid at 31 December	1 100

Tenant 2:

	$
Rent received during the year	18 200
Rent received in advance at 31 December	900

a. Prepare journal entries to record the transfer of rent received for Tenant 1 and for Tenant 2 to the income statement for the year ended 31 December 2018.
b. Prepare two rent received accounts (one for each tenant) for the year ended 31 December 2018. Balance both accounts at the year end.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

Preparing vertical financial statements including adjustments

Illustration 5

Preparing an income statement (trading and profit and loss account) in vertical format including adjustments and statement of financial position (balance sheet) extracts in vertical format

Victoria is preparing her income statement (trading and profit and loss account) for the year ended 31 December 2018. Her business has made a gross profit of $125 000. Her trial balance includes the following items:

Trial balance at 31 December 2018 (extract)		
	Dr	Cr
	$	$
General expenses	26 000	
Insurance	9 000	
Interest received		7 000
Rent received		14 000
Wages	75 000	

Victoria provides the following additional information at 31 December 2018:

- general expenses: $4 000 accrued
- insurance: $1 000 prepaid
- interest received: $2 000 due but unpaid
- rent received: $3 000 received in advance
- wages: $5 000 accrued.

Step 1: Work out the effect of the adjustments. The table below summarises the effects.

	Amount in trial balance	Amount to be recorded in the income statement (trading and profit and loss account)	Adjustment in statement of financial position (balance sheet)
	$	$	
General expenses	26 000	30 000	Current liability, $4 000
Insurance	9 000	8 000	Current asset, $1 000
Interest received	7 000	9 000	Current asset, $2 000
Rent received	14 000	11 000	Current liability, $3 000
Wages	75 000	80 000	Current liability, $5 000

Step 2: Prepare the profit and loss section of the income statement.

Victoria Income statement (trading and profit and loss account) for the year ended 31 December 2018		
	$	$
Gross profit	125 000	
Interest received	9 000	
Rent received	11 000	
		145 000
General expenses	30 000	
Insurance	8 000	
Wages	80 000	
		118 000
Net profit		27 000

Tip

While you are getting used to making these adjustments, it is easy to make a mistake when entering details on the statement of financial position (balance sheet). Remember that current assets represent money owed to the business (expenses prepaid and income due), while current liabilities represent money owed by the business (expense accruals and income received in advance).

Step 3: Prepare extracts from the statement of financial position (balance sheet) at 31 December 2018.

Victoria Statement of financial position (balance sheet) at 31 December 2018 (extracts)		
	$	$
CURRENT ASSETS		
Inventory	xx	
Accounts receivables	xx	
Income due: interest	2000	
Prepaid expenses: insurance	1000	
Cash at bank	xx	
		xx
CURRENT LIABILITIES		
Accounts payables	xx	
Income received in advance: rent	3000	
Expenses due: general expenses and wages	9000	
		xx
WORKING CAPITAL		xx

Practice questions

7. Preparing end-of-year financial statements

Sherry is the owner of a business called Paradise Beachwear. On 31 March 2018 the following balances appeared in her business's books of account after the preparation of the trading account.

	Dr	Cr
	$	$
Accounts payable		33000
Accounts receivable	29000	
Capital		508000
Cash at bank	11000	
Drawings	41000	
Gross profit		232000
Insurance	17000	
Inventory at 31 March 2018	52000	
Non-current assets	480000	
Office expenses	19000	
Rent received		24000
Wages	148000	
	797000	797000

Additional information at 31 March 2018:

- insurance, $1 000, prepaid
- rent received, $2 000, due but unpaid
- wages, $4 000, due but unpaid.

Prepare the statement of profit and loss section of the income statement for the year ended 31 March 2018 and a statement of financial position (balance sheet) at that date using vertical formats.

8. Preparing end-of-year financial statements

On 30 September 2018, the following trial balance was extracted from the accounts of the business owned by Mikhail after the preparation of the trading account for the year ended on that date.

Trial balance at 30 September 2018		
	Dr $000	Cr $000
Accounts payable		72
Administration expenses	34	
Bank loan (repayable 2025)		80
Bank loan interest	7	
Capital		665
Cash at bank	14	
Drawings	59	
Gross profit		368
Inventory at 30 September 2018	61	
Non-current assets	820	
Rent received		38
Salaries	185	
Selling expenses	43	
	1 223	1 223

Additional information at 30 September 2018 (in $000):

- administration expenses, $3, prepaid
- bank loan interest, $1, due but unpaid
- rent, $3, received in advance
- salaries, $5, due but unpaid
- selling expenses, $2, prepaid.

Prepare the statement of profit and loss section of the income statement for the year ended 30 September 2018 and a statement of financial position (balance sheet) at that date using vertical formats.

9. Preparing a full set of end-of-year financial statements

The Three Diamonds Music Store is owned by Kersha. The business's trial balance at 31 August 2018 was as follows.

Trial balance at 31 August 2018		
	Dr	Cr
	$	$
Accounts payable		3310
Accounts receivable	4520	
Bank overdraft		2380
Capital		370360
Carriage inwards	1190	
Discounts allowed	320	
Drawings	38750	
General expenses	4480	
Insurance	7440	
Inventory at 1 September 2017	38750	
Non-current assets	375000	
Purchases	284300	
Rent received		4170
Revenue		410960
Wages	36430	
	791180	791180

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

Additional information at 31 August 2018:

- inventory, $34 330
- general expenses, $440, prepaid
- insurance, $210, prepaid
- rent, $170, received in advance
- wages, $560, due but unpaid.

Prepare an income statement (trading and profit and loss account) for the year ended 31 August 2018 and a statement of financial position (balance sheet) at that date using vertical formats.

6.2 Depreciation

Objectives

By the end of this unit you will be able to:

- explain the term depreciation
- calculate depreciation charges using two different methods
- record depreciation in the journal and ledger accounts
- prepare end-of-year financial statements taking account of depreciation.

What is depreciation?

Non-current assets lose value as they are used by a business. This loss of value is called **depreciation**. The idea of usage causing a loss in value is often expressed as 'wear and tear'.

A non-current asset might also lose value because of the following factors:

- Technological change: equipment (such as computers) can rapidly cease to be up to date and therefore unable to meet the needs of the business that owns them (i.e. obsolescence).
- Some non-current assets might become inadequate as a business grows and lose their value to the business as result. For example, the office photocopier could be unable to cope with increased demand if the business rapidly grew in size.
- Time factor: the life of some assets has a legal limit. For example, some business premises are held on what is called a lease, where there is an agreement to pay rent for a period of years. The lease is likely to have no value when the expiry date is reached.

Depreciation is an expense and so it needs to be taken into account when calculating profit.

You may be wondering if there are any non-current assets that are not subject to depreciation. There is just one obvious example: land (except where the land is used for mining or quarrying purposes).

Key term

Depreciation: the loss in value of a non-current asset over its useful life.

Link

Depreciation is another example of the accruals (or matching) concept described in Unit 6.1 which requires profit to be based on matching all the costs of running a business during a financial period with the income for that period.

How is depreciation calculated?

Depreciation is an estimate of the loss in value over the period of time when the asset is useful to the business. There are many ways of making this estimate, but two are in common use.

Key terms

Straight-line method: where the annual depreciation charge is based on the cost of the non-current asset and is the same amount each year. This method is sometimes called the "fixed instalment method".

Reducing-balance method: where the annual depreciation charge is based on the value of the non-current asset at the beginning of the year under review. This method is sometimes called the "diminishing balance method".

Net book value (NBV): the value of a non-current asset that takes account of its cost less the total depreciation to date.

Illustration 6

The straight-line method of depreciation

A business bought a delivery vehicle for $50 000. The owner of the business has decided that the vehicle will be of use to the business for four years.

The **straight-line method** charges depreciation evenly over the lifetime of the asset. In this case, the annual charge would be:

$$\frac{\$50\,000}{4} = \$12\,500 \text{ per year.}$$

The depreciation charge is equivalent to 25% per year.

Sometimes the owner of the business might assume that the vehicle will have some value when it is disposed of – often referred to as the "scrap value" or sometimes the "residual value". In this example, if the owner estimated that the vehicle would have a scrap value of $6 000, the annual depreciation charge would be calculated as follows:

$$\frac{\$50\,000 \quad \$6\,000 \text{ (scrap value)}}{4} = \$11\,000$$

Illustration 7

The reducing-balance method of depreciation

This alternative method of calculating depreciation takes into consideration the idea that non-current assets do not necessarily lose the same amount of value each year: it recognises that some non-current assets lose more value in the first years and less in the final years of their useful life. The method is usually referred to as the **reducing-balance method**.

Take the example of the owner of a business who purchased some equipment for $20 000. To use this method, the owner would need to decide on an annual rate of depreciation – say 20%.

Here is how the annual depreciation charge would be calculated.

Year	Calculation	Depreciation charge	Value at end of year
1	20% × $20 000	$4 000	$16 000
2	20% × $16 000	$3 200	$12 800
3	20% × $12 800	$2 560	$10 240

and so on …

Note: in this method, the annual depreciation charge is based on the value of the asset at the beginning of the year in which the charge is to be made. This value is usually referred to as the "**net book value**" and sometimes this is abbreviated and shown as "NBV".

Practice questions

10. Calculating depreciation

Avianne's business has the following non-current assets:

	Cost	Depreciation Year 1	Depreciation Year 2
	$	$	$
Equipment	90 000		
Furniture and fittings	65 000		
Vehicle	40 000		

Avianne has made the following decisions about depreciation policy:

- Equipment should be depreciated using the straight-line method; it has a useful life of four years.
- Furniture and fittings should be depreciated using the straight-line method; they have a useful life of five years and should have a scrap value of $3 000.
- The vehicle should be depreciated using the reducing-balance method; the depreciation rate is 20%.

Complete a table to show the depreciation charges on each non-current asset for Year 1 and Year 2.

11. Calculating depreciation

Bradley opened his business on 1 January Year 1 with the following non-current assets:

	Cost	Depreciation Year 1	Depreciation Year 2
	$	$	$
Machinery	320 000		
Fixtures	50 000		
Vehicles	130 000		

Bradley has made the following decisions about depreciation policy:

- Machinery should be depreciated using the straight-line method; it has a useful life of five years.
- Fixtures should be depreciated using the straight-line method; they have a useful life of four years and should have a scrap value of $4 000.
- The vehicle should be depreciated using the reducing-balance method; the depreciation rate is 25%.

Complete a table to show the depreciation charges on each non-current asset for Year 1 and Year 2.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

Recording depreciation in the accounts

Businesses normally keep separate records of the cost of each type of non-current asset and the accumulating depreciation on each. So, in the general ledger you are likely to find, for example, the following two accounts:

- vehicles (at cost) account
- provision for depreciation of vehicles account.

At the end of each financial year the provision for depreciation account is updated with the annual depreciation charge. The procedure is as follows:

Step 1: Record the annual depreciation charge in the general journal.

Step 2: Post the journal entry to the accounts:

- debit the profit and loss section of the income statement
- credit the provision for depreciation account.

The profit and loss section of the income statement is debited with depreciation to ensure that profits are reduced for the year under review. The credit entry in the provision account has the effect of reducing the value of the non-current asset.

Illustration 8

Accounting records for depreciation

A business owns equipment that cost $50 000 and was purchased at the beginning of Year 1. The policy is to depreciate equipment by 20% per annum using the straight-line method.

Let's look at how to depreciate this equipment at the ends of Year 1 and Year 2.

Year 1

Step 1: Calculate the depreciation charge: 20% × $50 000 = $10 000

Step 2: Make a journal entry at the end of the year to record the depreciation.

Journal			
Date	**Details**	**Dr**	**Cr**
Year 1		$	$
Dec 31	Income statement (profit and loss account)	10 000	
	Provision for depreciation (equipment)		10 000
	Entries to charge depreciation of equipment at the year end		

Step 3: Post the entries in the journal to the accounts.

Dr	Equipment			Cr		
Year 1			$			$
Jan 1	Balance		50 000			

Dr	Provision for depreciation of equipment			Cr		
			$	Year 1		$
				Dec 31	Income statement	10 000

Income statement (profit and loss account) for the year ended 31 December Year 1		
	$	$
Gross profit		xx
Expenses	xx	
Depreciation of equipment	10 000	
		xx
Net profit		xx

Year 2

Step 1: Calculate the depreciation charge. As the business uses the straight-line method, the depreciation charge is again $10 000.

Step 2: At the year end, prepare the journal entry to record depreciation for the second year.

Journal			
Date	Details	Dr	Cr
Year 2		$	$
Dec 31	Income statement	10 000	
	Provision for depreciation (equipment)		10 000
	Entries to charge depreciation of equipment at the year end		

Step 3: Post the entries in the journal to the accounts.

Dr	Equipment			Cr		
Year 1			$			$
Jan 1	Balance		50 000			

Dr	Provision for depreciation of equipment			Cr		
Year 1			$	Year 1		$
Dec 31	Balance b/d		10 000	Dec 31	Income statement	10 000
				Year 2		
				Jan 1	Balance c/d	10 000
				Dec 31	**Income statement**	**10 000**

Notes:

- The key feature to note is how the provision account steadily accumulates depreciation charges over the years. By the end of Year 1, the balance on this account is $10 000, by the end of Year 2 the balance is $20 000. At the end of Year 3, the balance would become $30 000, and so on.
- In the ledger, the non-current asset (at cost) account does not change, because depreciation is recorded separately.

Income statement (profit and loss account) for the year ended 31 December Year 2		
	$	$
Gross profit		xx
Expenses	xx	
Depreciation of equipment	10 000	
		xx
Net profit		xx

Practice questions

12. Accounting records for depreciation

Refer to your answer for Question 10 and prepare the accounting records to record information about non-current assets and depreciation charges for both Year 1 and Year 2. Include the following:

a. journal entries
b. non-current asset accounts (at cost)
c. provision for depreciation accounts
d. extracts from the profit and loss sections of the income statements.

Tip

In some businesses, it is the policy to make use of a "depreciation expense account". Where this is the case, depreciation is first debited to a temporary depreciation expense account (instead of the income statement) and credited to the provision for depreciation account. When all the depreciation charges have been debited to the depreciation expense account, the total is transferred to the income statement as one figure for the financial period.

13. Accounting records for depreciation

Refer to your answer for Question 11 and prepare the accounting records to record information about non-current assets and depreciation charges for both Year 1 and Year 2. Include the following:

a. journal entries
b. non-current asset accounts (at cost)
c. provision for depreciation accounts
d. extracts from the profit and loss sections of the income statements

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

How does depreciation affect the statement of financial position (balance sheet)?

When a statement of financial position (balance sheet) is prepared at the end of each financial year, it needs to show the net value of each non-current asset, that is, the original cost less the balance of the provision for depreciation account. The statement of financial position (balance sheet) needs to reflect the owner of the business's view of the estimated value of each non-current asset.

Illustration 9

Statement of financial position (balance sheet) and depreciation

Taking the information in Illustration 8, here are extracts from the business's statement of financial position (balance sheet) for each of Years 1 and 2.

The table below summarises the information about the equipment.

Year	Cost	Balance of provision account at end of year	Net value of equipment at end of year
	$	$	$
Year 1	50 000	10 000	40 000
Year 2		20 000	30 000

Here is an extract from the business's statement of financial position (balance sheet) at the end of Year 1.

Statement of financial position (balance sheet) at 31 December, Year 1 (extract)			
	Cost	Total depreciation	Net
	$	$	$
NON-CURRENT ASSETS			
Equipment	50 000	10 000	40 000
CURRENT ASSETS			
Accounts receivable		xx	
Inventory		xx	
etc.			

Here is a similar extract from the statement of financial position (balance sheet) at the end of Year 2.

Tip

When preparing a business's end-of-year financial statements, remember it is just that year's depreciation charge that is recorded in the statement of profit and loss in the income statement, but it is the total depreciation to date that is used when preparing the statement of financial position (balance sheet).

You may be tempted to try to record depreciation in the asset account. Remember that the cost of an asset and depreciation charges are recorded in two separate accounts.

Statement of financial position (balance sheet) at 31 December, Year 2 (extract)			
	Cost	Total depreciation	Net
	$	$	$
NON-CURRENT ASSETS			
Equipment	50 000	20 000	30 000
CURRENT ASSETS			
Accounts receivable		xx	
Inventory		xx	
etc.			

Practice questions

14. Statement of financial position (balance sheet) and depreciation

Refer to your answer for Question 12 and prepare extracts from the statements of financial position (balance sheets) for the ends of Year 1 and Year 2 to show how information about non-current assets should be recorded.

15. Statement of financial position (balance sheet) and depreciation

Refer to your answer for Question 13 and prepare extracts from the statements of financial position (balance sheets) for the ends of Year 1 and Year 2 to show how information about non-current assets should be recorded.

16. Preparing end-of-year financial statements including depreciation for a business in Year 1

Great Value Stores was opened on 1 January 2018. At the end of the business's first year of trading the following trial balance was extracted from the books of account after the preparation of the trading account.

Trial balance at 31 December 2018		
	Dr	Cr
	$	$
Accounts payable		18 000
Accounts receivable	15 000	
Capital		68 000
Cash at bank	6 000	

Drawings	37 000	
Equipment	44 000	
Gross profit		100 000
Inventory at 31 December 2018	12 000	
Other operating expenses	24 000	
Rent	13 000	
Vehicles	35 000	
	186 000	186 000

Additional information:

- rent, $1 000, prepaid at 31 December 2018
- other operating expenses, $3 000, due but unpaid at 31 December 2018
- depreciation policy:
  - equipment should be depreciated over a four-year period using the straight-line method, taking account of the expected scrap value of $4 000
  - vehicles are to be depreciated by 25% per annum using the reducing-balance method.

Prepare the business's first end-of-year financial statements.

17. Preparing end-of-year financial statements including depreciation for a business Year 1

Jody opened her jewellery business on 1 January 2018. At the end of the business's first year of trading, the following trial balance was extracted from the books of account after the preparation of the trading account.

Trial balance at 31 December 2018		
	Dr	Cr
	$	$
Accounts payable		6 200
Accounts receivable	4 100	
Bank overdraft		11 300
Capital		41 300
Drawings	42 400	
Equipment	23 000	
Fixtures and fittings	36 000	
Gross profit		145 700
Insurance	8 800	
Inventory at 31 December 2018	14 900	
Other operating expenses	75 300	
	204 500	204 500

Additional information:

- insurance, $700, prepaid at 31 December 2018
- other operating expenses, $2 200, due but unpaid at 31 December 2018
- depreciation policy:
  - equipment should be depreciated over a five-year period using the straight-line method, taking account of the expected scrap value of $1 500
  - fixtures and fittings are to be depreciated by 40% per annum using the reducing-balance method.

Prepare the business's first end-of-year financial statements.

18. Preparing end-of-year financial statements for an established business

Krishna owns a health food wholesale business that was opened three years ago on 1 January 2016. The following trial balance has been extracted from the business's books of account at the end of the third year of trading.

Trial balance at 31 December 2018		
	Dr $	Cr $
Accounts payable		11 210
Accounts receivable	7 470	
Capital		45 690
Cash at bank	13 850	
Drawings	29 900	
Electricity	7 840	
Equipment:		
Cost	32 000	
Provision for depreciation at 1 January 2018		12 800
Gross profit		137 230
Inventory at 31 December 2018	17 380	
Rent	14 190	
Selling expenses	3 860	
Vehicles:		
Cost	48 000	
Provision for depreciation at 1 January 2018		21 000
Wages	53 440	
	227 930	227 930

Additional information:

- expenses prepaid at 31 December 2018: rent, $880; selling expenses, $190
- expenses due but unpaid at 31 December 2018: electricity, $330; wages, $2 020
- depreciation policy:
  - equipment is depreciated by 20% per annum using the straight-line method;
  - vehicles are depreciated by 25% per annum using the reducing-balance method.

Prepare the business's income statement (trading and profit and loss account) for the year ended 31 December 2018 and a statement of financial position (balance sheet) at that date.

19. Preparing end-of-year financial statements for an established business

Pulchan Fresh Foods is a retail unit opened three years ago by Lisa Pulchan. The following trial balance has been extracted from the business's books of account at the end of the third year of trading.

Trial balance at 31 December 2018

	Dr $	Cr $
Accounts payable		4830
Accounts receivable	4020	
Bank overdraft		2370
Capital		24000
Carriage outwards	470	
Drawings	33500	
Furniture and fittings:		
Cost	28000	
Provision for depreciation at 1 January 2018		16800
General expenses	3340	
Insurance	7290	
Inventory at 1 January 2018	18360	
Purchases	249310	
Returns	2210	3720
Revenue		382880
Vehicles:		
Cost	60000	
Provision for depreciation at 1 January 2018		39280
Wages	67380	
	473880	473880

Additional information:

- inventory on 31 December 2018 valued at $16 530
- expense prepaid at 31 December 2018: insurance, $320
- expenses due but unpaid at 31 December 2018: wages, $1 420
- depreciation policy:
  - furniture and fittings are depreciated by 20% per annum using the straight-line method
  - vehicles are depreciated by 20% per annum using the reducing-balance method.

Prepare the business's income statement (trading and profit and loss account) for the year ended 31 December 2018 and a statement of financial position (balance sheet) at that date.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

6.3 Bad debts and provisions for doubtful debts

Objectives

By the end of this unit you will be able to:

- explain the term bad debts
- record bad debts in the accounting records
- explain why some businesses have a provision for doubtful debts
- prepare the accounting records for a provision for doubtful debts.

What are bad debts?

Sometimes businesses face the serious problem that an account receivable is unable or unwilling to pay the amount due. This might arise when the customer concerned disputes the amount owed or when the customer has gone out of business. Why is this serious? The answer is that a business, faced with what is called a **bad debt**, is going to lose not only some of the profit it had expected to make, but also the cash that the account receivable should have been paying. When this situation arises, it is important that action is taken promptly and the amount due is written off.

Key term

Bad debt: an amount owed by an account receivable that will not be paid.

How to write off bad debts

Accounting records need amendment when a bad debt occurs so that the account of the account receivable is closed and (eventually) profits are reduced.

Illustration 10

Writing off a bad debt

Kimberly owns a business that sells goods on credit to many customers, one of which is Oasis Ltd. This customer's account in Kimberly's sales ledger shows that a sale took place on 11 January 2018 and the amount due was $1 800. By 15 May 2018, it became clear that this debt would not be paid. Kimberly decided that the account should be written off.

Here are the required entries in Kimberly's books of account, starting with a journal entry.

Journal				Page 9
Date	Details		Dr	Cr
			$	$
May 15	Bad debts	GL7	1800	
	Accounts receivable: Oasis Ltd	SL3		1800
	Entries to write off bad debt			

Notes:

- The bad debts account is an expense account.
- At the financial year end, the bad debts account will be closed and the total of bad debts for the year will be transferred to the profit and loss section of the income statement.

SALES LEDGER

Dr						Oasis Ltd (Account No. 3)					Cr
					$						$
Jan	11	Sales		SB4	1800	May	15	Bad debts		J9	1800

GENERAL LEDGER

Dr					Bad debts (Account No. 7)		Cr
					$		$
May	15	Oasis Ltd		J9	1800		

When Kimberly wrote off the bad debt she was following the accounting rule called the prudence concept which is described in Unit 6.1. This rule requires all businesses to ensure that users of their accounts are not misled into thinking that assets and profits are more in value than is realistic. So in this case, Kimberly was right to recognise the bad debt as soon as she was reasonably certain that no money would be received. To have kept the account of Oasis Ltd open in her books of account could have given other people the idea that the business had a valuable asset, when this was not the case.

Practice questions

20. Writing off a bad debt

The following balances appeared in the sales ledger of a business on 1 March 2018:

	$
Bestservice Ltd	3 850
Q&A Ltd	840

By 31 August 2018, it was apparent that neither of these accounts receivable would be able to pay the amount due and their accounts were written off as bad debts.

Prepare the accounting records to show this information in the books of account.

21. Writing off a bad debt

The following balances appeared in the sales ledger of a business on 1 July 2018:

	$
Murray Lee	540
Shantal Watson	1720

By 30 September 2018, it was apparent that neither of these accounts receivable would be able to pay the amount due and their accounts were written off as bad debts.

Prepare the accounting records to show this information in the books of account.

Provisions for doubtful debts

Since businesses can experience bad debts from time to time, it follows that the owners of those businesses continually face some uncertainty about whether all of their accounts receivable will actually pay the amount due. The question then arises as to whether it is right to show the total of accounts receivable on a statement of financial position (balance sheet) without indicating that a portion of the amount due may never be received. To ignore the possibility of doubtful debts would be a breach of an important accounting principle, and that is that all accounting statements should present a **true and fair** view of the business's financial position.

Many businesses ensure that their statement of financial position (balance sheet) gives a true and fair view of accounts receivable by quoting not just the total of all the balances in the sales ledger, but also making a deduction for an estimate of doubtful debts, called a **provision for doubtful debts** (sometimes called a provision for bad debts). This estimate is often based on the past experience of bad debts.

Provisions for doubtful debts are a further example of the concept of prudence, that is, businesses taking care not to overstate the value of assets and profits.

Illustration 11

Statement of financial position (balance sheet) and provisions for doubtful debts

On 31 December Year 1, Kerron's statement of financial position (balance sheet) shows the total accounts receivable to be $40 000. However, based on past experience, Kerron is doubtful that about 5% of this amount will be received.

Here is an extract from Kerron's statement of financial position (balance sheet) showing a true and fair view of accounts receivable.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

Key terms

True and fair: the principle that accounting records should be factually accurate wherever possible, or otherwise present a reasonable estimate of, or judgment about, the financial position.

Provision for doubtful debts: an amount set aside from profits to take account of the likelihood that some accounts receivable will not pay the amount due.

Kerron Statement of financial position (balance sheet) at 31 December Year 1 (extract)			
	$	$	$
CURRENT ASSETS			
Inventory		xx	
Accounts receivable	40 000		
Less provision for doubtful debts	2 000		
		38 000	

Ledger accounts and provisions for doubtful debts

When a business creates a provision for doubtful debts, it is not enough to show this information on the statement of financial position (balance sheet); it is also important to complete a double-entry record.

The accounting entries to create a provision for doubtful debts are:

- debit the profit and loss section of the income statement
- credit the provision for doubtful debts account.

Illustration 12

Accounting entries to create a provision for doubtful debts

Taking the information about Kerron's provision for doubtful debts in Illustration 11, here are the accounting records, starting with a journal entry.

Journal			
Date	Details	Dr	Cr
Year 1		$	$
Dec 31	Income statement	2 000	
	Provision for doubtful debts		2 000
	Entries to create a provision for doubtful debts		

GENERAL LEDGER					
Dr	Provision for doubtful debts				Cr
	$	Year	1		$
		Dec	31	Income statement	2 000

Kerron Income statement (profit and loss account) for the year ended 31 December Year 1		
	$	$
Gross profit		xx
Expenses	xx	
Provision for doubtful debts	**2 000**	
		xx
Net profit		xx

Keeping the provision for doubtful debts up to date

Once a provision for doubtful debts is created it should be reviewed annually.

When should a business increase its provision for doubtful debts?

If there is an increase in the total of accounts receivable at the year end, then the provision should be increased to keep in step with this change.

The entries required to increase a provision for doubtful debts are:

- debit the profit and loss section of the income statement with the amount of the increase
- credit the provision for doubtful debts account with the amount of the increase.

When should a business decrease its provision for doubtful debts?

The total of accounts receivable could decrease from one year to the next. In this situation the amount of the provision for doubtful debts should be decreased to keep in step with the decrease in accounts receivable.

The entries required to decrease a provision for doubtful debts are:

- debit the provision for doubtful debts account with the amount of the decrease
- credit the profit and loss section of the income statement with the amount of the decrease.

Notes:

- Creating a provision for doubtful debts reduces the profits of the year in which it is created, so the provision is debited in the income statement.
- The provision for doubtful debt account is deducted from accounts receivable on the statement of financial position (balance sheet) (see Illustration 11).
- The provision account remains in the accounting system, appearing in the trial balance as a credit balance, until such times as the owner decides it is no longer necessary.

Illustration 13

Changing the provision for doubtful debts

Returning to the case of Kerron's business (Illustrations 11 and 12), you will remember that at the end of Year 1 a provision for doubtful debts of $2 000 was created.

At the end of Year 2 the accounts receivable totalled $46 000.

At the end of Year 3 the accounts receivable totalled $34 000.

Kerron wishes to maintain the provision for doubtful debts at 5% of accounts receivable.

This means that the provision needs to change to 5% of $46 000 = $2 300 at the end of Year 2, an increase of $300. At the end of Year 3, the provision needs to change to 5% of $34 000 = $1 700, a decrease of $600.

Here are the entries in the accounting system for Year 2 and Year 3 to put into effect the changing value of the provision for doubtful debts.

Year 2

Journal			
Date	**Details**	**Dr**	**Cr**
Year 2		$	$
Dec 31	Income statement	300	
	Provision for doubtful debts		300
	Entries to increase the provision for doubtful debts		

Dr	Provision for doubtful debts			Cr
$	Year 1			$
	Dec 31	Income statement		2 000
	Year 2			
	Dec 31	Income statement		300

Kerron Income statement (profit and loss account) for the year ended 31 December Year 2		
	$	$
Gross profit		xx
Expenses	xx	
Increase in provision for doubtful debts	300	
		xx
Net profit		xx

The statement of financial position (balance sheet) will show the latest position.

Statement of financial position (balance sheet) at 31 December Year 2 (extract)			
	$	$	$
CURRENT ASSETS			
Inventory		xx	
Accounts receivables	46 000		
Less Provision for doubtful debts	2 300		
		43 700	

Year 3

Journal			
Date	Details	Dr	Cr
Year 3		$	$
Dec 31	Provision for doubtful debts	600	
	Income statement		600
	Entries to decrease the provision for doubtful debts		

Dr	Provision for doubtful debts			Cr			
Year 3			$	Year 1			$
Dec 31	Income statement		600	Dec 31	Income statement		2 000
				Year 2			
				Dec 31	Income statement		300

Income statement (profit and loss account) for the year ended 31 December Year 3		
	$	$
Gross profit	xx	
Add decrease in provision for doubtful debts	**600**	
		xx
Expenses	xx	
Expenses	xx	
		xx
Net profit		xx

The statement of financial position (balance sheet) will show the latest position.

Statement of financial position (balance sheet) at 31 December Year 3 (extract)			
	$	$	$
CURRENT ASSETS			
Inventory		xx	
Accounts receivable	34 000		
Less Provision for doubtful debts	1 700		
		32 300	

Tip

When preparing the end-of-year financial statements always check to see if there is already a provision for doubtful debts. If there is, remember any change in the provision is recorded in the profit and loss section of the income statement, but the full amount is shown on the statement of financial position (balance sheet). Also, avoid using informal abbreviations like PDD! Financial statements are very formal documents, so PDD would not impress.

Practice questions

22. Calculating provisions for doubtful debts

The owner of a business decided to introduce a provision for doubtful debts. It was agreed that the provision should be maintained at 5% of accounts receivable at each year end.

Accounts receivable at 31 December	
Year 1	$36 800
Year 2	$39 200
Year 3	$35 200

Complete the following table recording information about the business's provision for doubtful debts.

Year	Provision for doubtful debts	Amount to be entered in the income statement	Entry in the provision for doubtful debts account
	$	$	debit or credit
1			
2			
3			

23. Calculating provisions for doubtful debts

The owner of a business decided to introduce a provision for doubtful debts. It was agreed that the provision should be maintained at 2.5% of accounts receivable at each year end.

Accounts receivable at 31 December	
Year 1	$48 000
Year 2	$36 000
Year 3	$56 000

Complete the following table recording information about the business's provision for doubtful debts.

Year	Provision for doubtful debts	Amount to be entered in the income statement	Entry in the provision for doubtful debts account
	$	$	debit or credit
1			
2			
3			

24. Accounting records for provisions for doubtful debts

Using the information in Question 22, prepare the following accounting records for each of Years 1, 2 and 3 relating to provisions for doubtful debts:

a. journal entries
b. extract from the income statement (statement of profit and loss)
c. provision for doubtful debts account
d. extract from statement of financial position (balance sheet).

25. Accounting records for provisions for doubtful debts

Using the information in Question 23, prepare the following accounting records for each of Years 1, 2 and 3 relating to provisions for doubtful debts:

a. journal entries
b. extract from the income statement (statement of profit and loss)
c. provision for doubtful debts account
d. extract from statement of financial position (balance sheet).

26. Preparing end-of-year financial statements including the creation of a provision for doubtful debts

Tricia owns a retail store. Her business's financial year end is 31 December. The following trial balance was extracted from the business's books of account on 31 December 2018.

Trial balance at 31 December 2018		
	Dr	Cr
	$	$
Accounts payable		11 850
Accounts receivable	27 000	
Bad debts	850	
Capital		62 210
Cash at bank	3 890	
Drawings	31 300	
Equipment:		
Cost	35 000	
Provision for depreciation at 1 January 2018		14 000
Gross profit		151 270
Inventory at 31 December 2018	29 480	
Operating expenses	57 610	
Rent	25 400	
Vehicles:		
Cost	45 000	
Provision for depreciation at 1 January 2018		16 200
	255 530	255 530

Additional information at 31 December 2018:

- rent, $1 320, prepaid
- operating expenses, $2 080, due but unpaid
- Tricia decided to create a provision for doubtful debts of 5% of accounts receivable at the year end

- depreciation charged on non-current assets as follows:
  - equipment is depreciated by 20% per annum using the straight-line method
  - vehicles are depreciated by 20% per annum using the reducing-balance method.

Prepare end-of-year financial statements.

27. Preparing end-of-year financial statements including the creation of a provision for doubtful debts

Patrick, a wholesaler, extracted the following trial balance from his business's books of account at 31 August 2018.

Trial balance at 31 August 2018		
	Dr	Cr
	$	$
Accounts payable		22373
Accounts receivable	18360	
Bad debts	1475	
Capital		72934
Cash at bank	9872	
Discounts	889	2071
Drawings	44482	
Electricity	3783	
Fixtures and fittings:		
Cost	45000	
Provision for depreciation at 1 September 2017		27000
Gross profit		194356
Insurance	7794	
Inventory at 31 August 2018	58384	
Vehicles:		
Cost	80000	
Provision for depreciation at 1 September 2017		48250
Wages and salaries	96945	
	366984	366984

Additional information at 31 August 2018:

- prepaid expenses: insurance, $375; electricity, $446
- expenses due but unpaid: wages and salaries, $2 970
- Patrick decided to create a provision for doubtful debts of 5% of accounts receivable at the year end

- depreciation charged on non-current assets as follows:
  - fixtures and fittings are depreciated by 20% per annum using the straight-line method
  - vehicles are depreciated by 25% per annum using the reducing-balance method.

Prepare end-of-year financial statements.

28. Preparing end-of-year financial statements including revising the provision for doubtful debts

The following trial balance was extracted from the books of Magna, a wholesale business, on 31 July 2018.

Trial balance at 31 July 2018		
	Dr	Cr
	$	$
Accounts payable		33 670
Accounts receivable	18 900	
Bad debts	320	
Capital		476 750
Carriage inwards	4 620	
Cash at bank	3 080	
Discounts	450	1 730
Drawings	45 450	
Equipment:		
Cost	58 000	
Provision for depreciation at 1 August 2017		11 600
General expenses	24 490	
Inventory at 1 August 2017	62 330	
Premises:		
Cost	480 000	
Provision for depreciation at 1 August 2017		9 600
Provision for doubtful debts at 1 August 2017		820
Purchases	568 380	
Rent received		26 380
Returns	6 360	8 940
Revenue		909 490
Vehicles:		
Cost	70 000	
Provision for depreciation at 1 August 2017		17 500
Wages	138 580	
Water charges	15 520	
	1 496 480	1 496 480

Additional information at 31 July 2018:

- inventory valued at $47 370
- prepaid expenses: general expenses, $805
- expenses due but unpaid: wages, $4 110; water charges, $660
- rent received, $1 270, due but unpaid
- policy is to maintain the provision for doubtful debts at 5% of accounts receivable at the year end
- depreciation charged on non-current assets as follows:
  - premises are depreciated by 2% per annum using the straight-line method
  - equipment is depreciated by 20% per annum using the straight-line method
  - vehicles are depreciated by 25% per annum using the reducing-balance method.

Prepare the business's income statement for the year ended 31 July 2018 and a statement of financial position (balance sheet) at that date.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

6.4 End-of-year financial statements for a service business

Objectives

By the end of this unit you will be able to:

- identify service businesses
- prepare end-of-year financial statements for a service business.

Service businesses

All the businesses you have looked at so far have been selling goods. However, many businesses provide a service rather than selling goods. In fact, service businesses are a very important part of most countries' economies.

Here are just a few examples of some businesses providing services:

- accountant
- beautician
- car repairs
- electrician
- health club
- interior design
- plumber
- taxi service.
- advertising agency
- bookkeeping services
- cleaning
- hairdresser
- home repairs
- legal services
- staffing agency

End-of-year financial statements of a service business

The end-of-year financial statements for a service business are prepared in very much the same way as for all of the businesses you have studied so far. There is one important difference, however, and that is that a trading account section of the income statement is not required, because a service business does not sell goods. Instead, the income statement consists of the profit and loss section only, starting with the revenue from providing the service less all the business's expenses and ending, of course, with a figure for profit or loss.

Illustration 14

Example of a service business's income statement

Here is a typical income statement of a service business.

Snippets Hairdressing Salon
Income statement (profit and loss account)
for the year ended 31 August 2018

	$	$
Revenue (receipts from customers)		98 000

Less expenses:		
Administration expenses	5000	
Depreciation (equipment etc.)	18000	
Electricity	3500	
Insurance	4100	
Wages of assistants	39500	
Water charges	4200	
		74300
Net profit		23700

Practice questions

29. Preparing end-of-year financial statements for a service business

Kisha owns Venus Beauty Studios. Her business's financial year ended on 31 May 2018, when the following trial balance was extracted from her business's books of account.

Trial balance at 31 May 2018		
	$	$
Accounts payable		1820
Capital		45580
Cash at bank	8580	
Drawings	31850	
Electricity	8810	
Equipment:		
Cost	56000	
Provision for depreciation at 1 June 2017		14000
Furniture and fittings:		
Cost	28000	
Provision for depreciation at 1 June 2017		5600
General expenses	9440	
Materials (cosmetics, etc.) (expense)	25320	
Rent	18150	
Revenue (receipts from customers)		193260
Wages of assistants	66370	
Water charges	7740	
	260260	260260

Additional information at 31 May 2018:

- rent, $630, due but unpaid; general expenses, $490, prepaid
- depreciation should be provided as follows: equipment, 25% per annum using the straight-line method; furniture and fittings, 20% per annum using the reducing-balance method.

Prepare an income statement (profit and loss account) for the year ended 31 May 2018 and a statement of financial position (balance sheet) at that date.

30. Preparing end-of-year financial statements for a service business

Zamran owns Zamran's Taxis. His business's financial year ended on 31 July 2018, when the following trial balance was extracted from his business's books of account.

Trial balance at 31 July 2018		
	$	$
Accounts payable		640
Accounts receivable	770	
Bank loan (repayable 2025)		50 000
Bank overdraft		4 510
Capital		142 120
Cash in hand	460	
Drawings	41 580	
Drivers' wages	95 420	
Furniture and equipment:		
Cost	18 500	
Provision for depreciation 1 August 2017		3 700
Insurance	14 340	
Office expenses	5 570	
Loan interest	3 320	
Rent	22 240	
Revenue (receipts from customers)		174 330
Vehicle fuel charges	23 490	
Vehicle repairs	5 610	
Vehicles:		
Cost	180 000	
Provision for depreciation 1 August 2017		36 000
	411 300	411 300

Additional information at 31 July 2018:

- drivers' wages, $1 450, due but unpaid; insurance, $860, prepaid
- depreciation should be provided as follows: furniture and equipment, 20% per annum using the straight-line method; vehicles, 20% per annum using the reducing-balance method.

Prepare an income statement (profit and loss account) for the year ended 31 July 2018 and a statement of financial position (balance sheet) at that date.

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

6.5 Revenue expenditure and capital expenditure

Objectives

By the end of this unit you will be able to:

- explain the main features of revenue expenditure
- prepare end-of-year financial statements for a service business.

Key terms

Revenue expenditure: expenditure on everyday running costs, which is recorded in the income statement.

Capital expenditure: expenditure on non-current assets, which is recorded in the statement of financial position (balance sheet).

What is revenue expenditure?

Revenue expenditure is expenditure incurred on everyday running costs. The effect of revenue expenditure is not expected to last more than 12 months. Examples include:

- rent payable
- insurance
- administration expenses
- repair of motor vehicles
- maintenance of machinery.

What is capital expenditure?

Capital expenditure is expenditure incurred on non-current assets, including the purchase, amendment or improvement of non-current assets. The effect of capital expenditure is expected to last more than 12 months.

Examples include:

- permanent improvement of a non-current asset, for example the installation of air conditioning within a property
- installation of computer equipment
- delivery charges paid on a non-current asset
- legal costs of buying a property, for example solicitor's costs concerned with obtaining a lease.

The following table gives some more examples of revenue and capital expenditure.

Non-current asset	Revenue expenditure	Capital expenditure
Buildings	Maintenance Redecoration Repairs	Cost of purchase Legal fees of purchase Cost of improvement/extension: • labour • carriage on materials Installation of facilities: • gas, electricity and water

Vehicles	Fuel Road tax Insurance Service costs Car repairs Car advertising artwork Extended warranty	Cost of purchase Cost of number plates Bodywork improvements Delivery costs
Equipment	Computer memory sticks Printer and copier paper Insurance Computer software Printer ink	Cost of purchase Installation of equipment Modifications/improvements to equipment

Treatment within the end-of-year financial statements

The most important consideration in regard to revenue and capital expenditure is their respective treatment within the end-of-year financial statements.

Revenue expenditure is incurred on every day running costs and is therefore recorded as an expense within the income statement (trading and profit and loss account), reducing profit for the year.

Capital expenditure is the purchase, amendment or improvement of non-current assets and is therefore recorded as an asset on the statement of financial position (balance sheet), increasing the value of non-current assets.

It is important that the expenditure is treated correctly. Otherwise, expenses will be overstated and profit and non-current assets undervalued; or expenses will be understated and non-current assets and profit overvalued. Any errors could cause the owner or manager to be misled about the success of the business leading to poor decision-making.

The following illustrations show the treatment of various examples of expenditure, distinguishing between capital and revenue expenditure.

Illustration 15

Examples of capital expenditure

A company purchases a new office building for $120 000 with legal costs of $2 400. A new computer system is also purchased for $10 000 with installation costs of $2 500.

This is all capital expenditure as the benefits from the expenditure will last many years.

Illustration 16

Example of revenue expenditure

The company pays for some repairs to machinery and the servicing of equipment.

This is all revenue expenditure as the payments do not add any value to the non-current assets.

Capital and revenue expenditure must be correctly allocated between the statement of financial position (balance sheet) and the income statement as only then will the final accounts accurately reflect the true and fair value of the profit and net assets of the business.

Illustration 17

Calculation of revenue and capital expenditure

A new car was purchased for one of the directors of A1 Supplies Ltd. The total expenditure is $19 000, made up of:

- cost of car, $15 400
- road tax, $240
- insurance, $700
- tank of fuel, $60
- advertising logo on side of car, $120
- bodywork alterations, $2 000
- delivery costs, $180
- number plates, $300.

Capital expenditure:

- cost of car, $15 400
- advertising logo on side of car, $120
- bodywork alterations, $2 000
- delivery costs, $180
- number plates, $300.

The capital expenditure is $18 000 – all the expenditure that has a lasting benefit.

Revenue expenditure:

- road tax, $240
- insurance, $700
- tank of fuel, $60.

The revenue expenditure is $1 000 – all the expenditure that has a short-term benefit.

Note: there will also be a charge for depreciation on the car. If the car is depreciated over five years using the straight-line method, depreciation will be $18 000/5 = $3 600 per annum.

Practice questions

31. The correct treatment of capital and revenue expenditure within the final accounts

A business buys a new delivery van on 1 March 2018. The cost of the van was $12 100; in addition, payment was made for new number plates, $230 and painting a logo on the van, $420. The van is to be depreciated using the straight-line method over five years. A full year's depreciation is to be charged in the year of purchase.

a. Prepare an extract to show the delivery van in the non-current assets section of the statement of financial position (balance sheet) at 31 October 2018.

b. Calculate the amount of revenue expenditure to be included in the income statement for the year ended 31 October 2018.

32. The correct treatment of capital and revenue expenditure within the final accounts

A business buys a factory at a cost of $500 000 on 1 November 2018. In addition, the business pays legal fees of $3 800 in connection with this purchase and $4 700 for the installation of electrical services.

The factory is to be depreciated over 20 years using the straight-line method. A full year's depreciation is to be charged in the year of purchase.

a. Prepare an extract to show the factory in the non-current assets section of the statement of financial position (balance sheet) at 31 December 2018.

b. Calculate the amount of revenue expenditure to be included in the income statement for the year ended 31 December 2018.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. The following information is available about a business for a financial year:

	$
Gross profit	245 000
Payments made for expenses	155 000
Discounts received	10 000

Expenses totalling $2 500 are prepaid for the following year.

What is the business's net profit for the financial year?

A $102 500 C $82 500
B $97 500 D $77 500

2. The following information is available about a business for a financial year:

	$
Gross profit	235 000
Payments made for expenses	145 000

Certain expenses totalling $10 000 are accrued for the following year, but other expenses totalling $5 000 are prepaid for the following year.

What is the business's net profit for the financial year?

A $105 000 C $85 000
B $95 000 D $75 000

3. The owner of a business purchased a non-current asset for $52 000. This non-current asset has an estimated residual value of $4 000 and is expected to be of use to the business for eight years.

What is the amount of straight-line depreciation to be charged each year?

A $4 800 C $6 500
B $6 000 D $7 000

4. After calculating the profit for a trading year at $75 000, an accountant found that a bad debt of $2 000 had been overlooked and that provision for doubtful debts of $2 500 should have been made.

When these items are taken into the account, the net profit will be:

A $79 500
B $75 500
C $74 500
D $70 500

5. A business has accounts receivable of $50 000 and maintains a provision for doubtful debts of 5% of accounts receivable. The present provision for doubtful debts is $2 000.

What will the ledger entries for the current year be?

A Debit provision for doubtful debts: $500: Credit income statement: $500
B Debit income statement: $500: Credit provision for doubtful debts: $500
C Debit income statement: $2 500: Credit provision for doubtful debts: $2 500
D Debit provision for doubtful debts: $2 500: Credit income statement: $2 500

6. The owner of a business has a policy of maintaining a provision for doubtful debts at 5% of accounts receivable at the year end. The following information is available:

Accounts receivable end of Year 1, $4 800
Accounts receivable end of Year 2, $4 000

At the end of Year 2, the entry required in the income statement for the provision for doubtful debts is:

A Debit $200 C Credit $40
B Debit $40 D Credit $200

7. Which of the following should be treated as capital expenditure in the accounts?
   - A Repairs to the air-conditioning unit for $440
   - B Purchase of four vans for resale for $32 000
   - C Office cleaning costs of $200
   - D Purchase of a new fax machine for the office for $98

8. Which of the following should be treated as revenue expenditure in the accounts?
   - A Installation of a new computer system
   - B Repairs to an office photocopying machine
   - C Delivery cost of new car
   - D Legal costs of a new lease

9. Which of the following items should be treated as capital expenditure in the books of a local food store?
   - A Payment for a short marketing campaign
   - B Purchase of a computerised cash register
   - C Repairs to a deep freeze cabinet
   - D Bulk purchase of frozen foods

10. In one week, the owner of a business selling fishing tackle made the following payments from the business's bank account:

	$
New computer	1 000
New display cabinet	6 500
Repair of delivery van	600
Rent of owner's private house	950

The business's revenue expenditure amounted to:

- A $600
- B $1 550
- C $8 450
- D $9 050

11. Capital expenditure should include:
   - A a payment for the hire of machinery
   - B a purchase of inventory for resale
   - C the payment for maintenance of machinery
   - D an increase in non-current assets

12. Revenue expenditure should be debited to:
   - A an accounts receivable's account
   - B an asset account
   - C the income statement
   - D a loan account

13. A business made the following payments during a recent week:

	$
Repairs to computer	800
Stationery used for computing	500
Purchase of computer software	1 000
Wages of computer operator	900

What was the total revenue expenditure for the week?

- A $900
- B $1 000
- C $1 700
- D $2 200

14. Which one of the following should be recorded as capital expenditure?
   - A Wages of machining staff
   - B Maintenance of machinery
   - C Carriage inwards paid on some new machinery
   - D Interest on the loan which provided funds to pay for new machinery

PAPER 2

Case study

This case study covers the preparation of financial statements including adjustments and also includes some tasks requiring explanations of various accounting processes.

Selena is not quite sure why it is necessary to make adjustments for unpaid expenses at

the year end, income received in advance and prepaid expenses.

a. Explain why adjustments are made to expense and income items when preparing financial statements.

Selena is also not quite sure of the difference between revenue and capital expenditure.

b. Explain the difference between revenue expenditure and capital expenditure. Illustrate your answer with one example of each type of expenditure

Additional information:

Selena Glenmore is the owner of Eagle Wholesale. The business's trial balance on 31 May 2018 was as follows.

Trial balance at 31 October 2018		
	Dr	Cr
	$	$
Accounts payable		29 400
Accounts receivable	24 320	
Bad debts	920	
Bank loan (repayable January 2019)		12 000
Capital		269 240
Carriage inwards	2 480	
Cash at bank	3 080	
Drawings	28 440	
Furniture and fittings		
Cost	48 500	
Provision for depreciation at 1 November 2017		22 500
General expenses	11 930	
Insurance	6 320	
Interest on bank loan	900	
Inventory at 1 November 2017	55 860	
Premises:		
Cost	360 000	
Provision for depreciation at 1 November 2017		14 400
Provision for doubtful debts at 1 November 2017		950
Purchases	412 110	
Rent received		7 470
Revenue		693 720
Wages and salaries	94 820	
	1 049 680	1 049 680

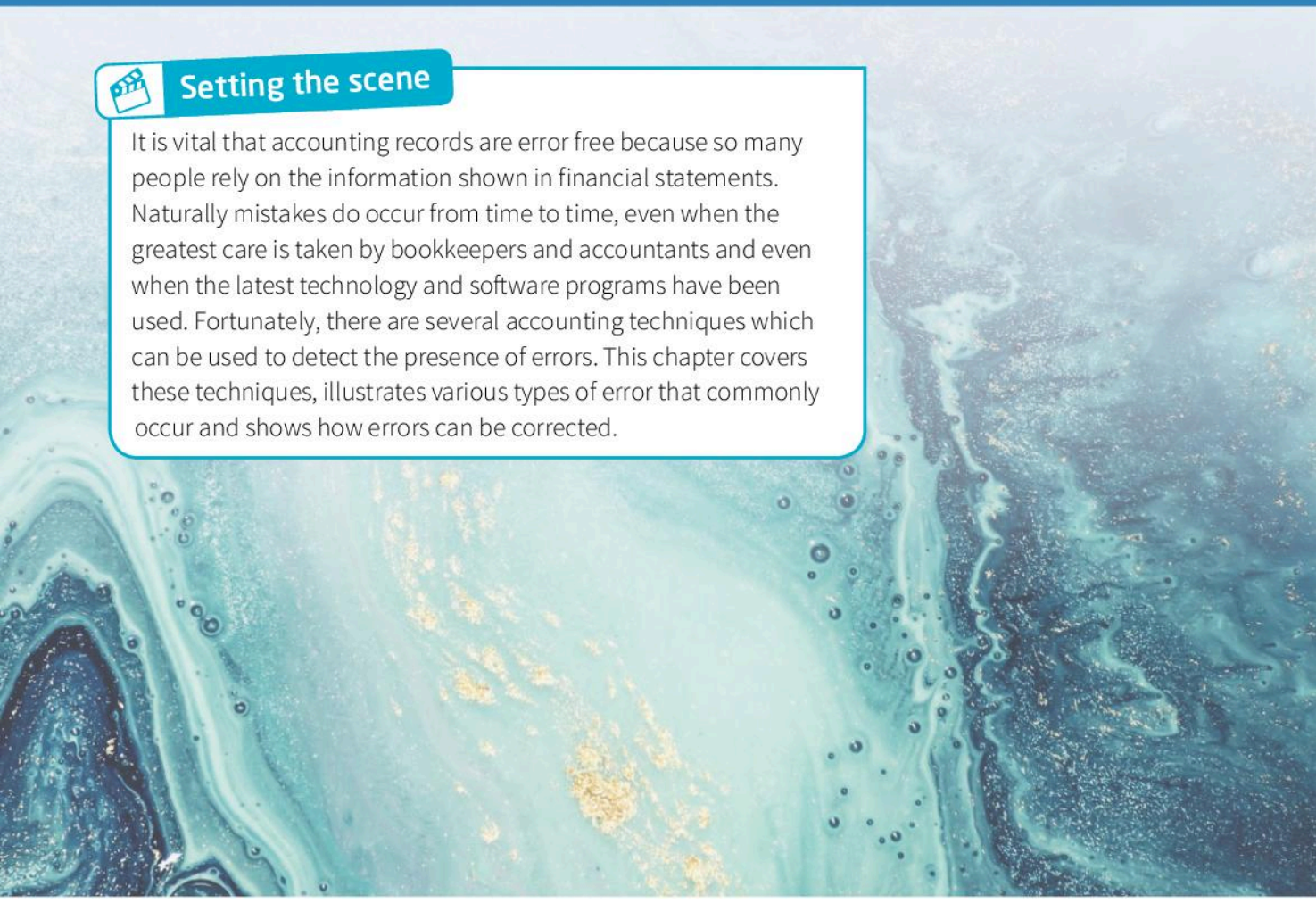
Additional information at 31 October 2018:

- inventory valued at $49 250
- prepaid expenses: general expenses, $120; insurance, $330
- expenses due but unpaid: wages and salaries, $2 880
- rent received in advance, $210
- Selena's policy is to maintain the provision for doubtful debts at 5% of accounts receivable at the year end
- depreciation charged on non-current assets as follows:
  - premises are depreciated by 2% per annum using the straight-line method
  - furniture and fittings are depreciated by 20% per annum using the reducing-balance method.

c. Prepare the business's income statement for the year ended 31 May 2018 and a statement of financial position (balance sheet) at that date.

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260.

7 Control systems



Setting the scene

It is vital that accounting records are error free because so many people rely on the information shown in financial statements. Naturally mistakes do occur from time to time, even when the greatest care is taken by bookkeepers and accountants and even when the latest technology and software programs have been used. Fortunately, there are several accounting techniques which can be used to detect the presence of errors. This chapter covers these techniques, illustrates various types of error that commonly occur and shows how errors can be corrected.

Syllabus coverage

	Syllabus	Unit
1	Explain the uses of control systems in the accounting process	7.1–7.3
2	Outline the three most commonly used control systems in the accounting process	
3	Distinguish between those errors which affect and those which do not affect the trial balance	7.1
4	Prepare journal entries for the correction of errors	
5	Explain the need for a suspense account	
6	Construct a suspense account	
7	Construct a statement of revised profit after the corrections of errors	
8	Explain the purpose of control accounts and how they are prepared	7.2
9	Identify the sources of information for entries in the control accounts	
10	Construct sales and purchases ledger control accounts	
11	Explain the significance of the balances on control accounts	
12	Identify items that will result in differences between cash book and bank statement balances	7.3
13	Construct a bank reconciliation statement using the adjusted cash book balance	

7.1 The trial balance and the correction of errors

Objectives

By the end of this unit you will be able to:

- explain the importance of control systems
- identify six types of errors that are not revealed by a trial balance
- prepare journal entries to correct these errors
- explain the correct process to follow when trial balance totals do not agree
- prepare journal entries to correct errors
- prepare statements to correct draft profits.

The importance of control systems

Accounting information has to be useful to the owners and managers of businesses and other stakeholders; otherwise there is little point in all the effort that goes into recording transactions. Accounting information will be used to judge the performance of the business and will form the basis for important decisions affecting the future of the organization.

However, accounting information can only be useful if it is accurate. If there are errors in the accounting records then decision-makers will not have confidence in financial statements or, even worse, will make misguided decisions. To ensure that accounting records are accurate and reliable, various techniques have been developed to check different parts of the accounting system. Some of these techniques, shown in the table below, will be explained in this and the next two units.

Checking technique	What does it check?
Trial balance	The arithmetical accuracy of the double-entry records
Bank reconciliation statement	That the bank columns in the cash book are up to date and agree with the bank's record of the business's current account
Control accounts	The arithmetical accuracy of the sales and purchases ledger accounts

Of course, no checking system is absolutely perfect, but these techniques do help to reduce the chances of errors occurring in the accounting system. They have another important advantage: because accounting records are continually reviewed for accuracy, the chances of fraud are also reduced (but sadly not totally eradicated).

The purpose of the trial balance

By now you will have prepared many trial balances. You will know how useful the trial balance can be as a guide as to whether your double-entry records are correct or not. To be more exact, the trial balance's main function is to check the arithmetical accuracy of the double-entry records. In effect, it checks that the total of debit entries matches the total of credit entries. You will also know that the trial balance is a very useful summary of all the balances in the ledger accounts, from which it is possible to prepare the end-of-year financial statements.

Limitations of the trial balance: errors not revealed by a trial balance

Unfortunately, the trial balance process does not detect every error that could be made in an accounting system. You could produce a trial balance where the totals agree, but where you have made some mistakes in recording transactions. In general, as long as you have made a matching debit and credit entry your trial balance totals will agree. So you could make a matching debit and credit entry for the wrong amount, or record the debit or credit entry in the wrong account, and all would appear to be well.

It is usual to classify these mistakes as one of six types of error not revealed by a trial balance. Each of these errors has to be corrected by making a journal entry which is then posted to the ledger accounts.

Here are the six types of error and the journal entries necessary to correct them.

Error of commission

An **error of commission** occurs when the double entry is made for the correct amount, but a mistake is made so that the debit or credit entry is made in the wrong account in a particular ledger.

Key term

Error of commission: where a debit or credit entry is made in the wrong account but within the correct group of accounts.

Illustration 1

Correcting an error of commission

On 23 February, a supplier, M Rajah, was paid $1 100 by cheque in settlement of the amount due. The entries made were as follows.

Dr			CASH BOOK (bank columns)				Cr
			$				$
				Feb	23	M Rajah	1 100

Dr			K Rajah			Cr
			$			$
Feb	23	Bank	1 100			

A journal entry is needed to correct this mistake as follows.

Notes:

- The correct amount has been recorded.
- There is a matching debit and credit entry.
- The debit entry had been recorded in the wrong account: K Rajah instead of M Rajah.

Journal			
Date	Details	Dr	Cr
		$	$
Feb 23	M Rajah	1 100	
	K Rajah		1 100
	Correction of error of commission		

All errors in an accounting system have to be corrected by making additional entries. It would be bad practice to cross out incorrect entries, because this could look as if the accounting records were being tampered with. In this illustration, part of the journal entry cancels out the error (the credit entry in K Rajah's account); and the other part records the entry that should have been made in the first place (debit M Rajah's account).

Here are the ledger accounts after this journal entry is posted:

Dr	K Rajah				Cr
		$			$
Feb 23	Bank	1 100	Feb 23	M Rajah	1 100

Dr	M Rajah				Cr
		$			$
Feb 23	K Rajah	1 100			

Key term

Error of omission: where a transaction is overlooked and no entries are made in the books of account.

Error of omission

An **error of omission** occurs when no record is made of a transaction. Often this is because a source document is overlooked or mislaid. When the error is discovered, a journal entry will be made to correct the omission, updating the relevant ledger accounts.

Illustration 2

Correcting an error of omission

On 3 June 2018, a credit note was received from a supplier, Jarel Ltd, for $330. However, it was misfiled and no entries were made. It was found on 22 June and the error was corrected as follows.

Journal			
Date	Details	Dr	Cr
		$	$
June 22	Jarel Ltd	330	
	Returns outwards		330
	Correction of error of omission of credit note number B372		

Dr		Jarel Ltd		Cr			
			$				$
June	22	Returns outwards	330				

Dr		Returns outwards		Cr			
			$				$
				June	22	Jarel Ltd	330

Note:

- no attempt is made to correct the returns outwards book.

Error of principle

Sometimes errors occur in the double-entry records because the accounts clerk is not sure of the correct treatment of a transaction. This results in a debit or credit entry being made in the wrong type of account. Mistakes of this kind are called **errors of principle**.

Key term

Error of principle: where a debit or credit entry is made in the wrong type of account.

Illustration 3

Correcting an error of principle

On 17 August 2018, a cheque for $490 was paid for repairs to machinery. The accounts clerk made the following entries for this transaction: Dr Machinery $490; Cr Bank $490. The error was to record the payment in the wrong type of account, that is, in an asset account rather than an expense account. It was corrected as follows.

Journal				
Date		Details	Dr	Cr
			$	$
Aug	17	Repairs	490	
		Machinery		490
		Correction of error of principle		

Dr		Machinery		Cr			
			$				$
Aug	17	Bank	490	Aug	17	Repairs	490

Dr		Repairs		Cr			
			$				$
Aug	17	Machinery	490				

Notes:

- There was a matching debit and credit entry for the correct amount so the trial balance totals would still agree.
- The correction requires the cancellation of the wrong entry (in the machinery account) and the recording of the correct entry (in the repairs account).

Tip

It is easy to confuse an error of commission with an error of principle. In both cases, an error is made in the wrong account. However, in the case of error of commission the error is made in the right type of account (for example, using the wrong receivable account, or confusing two similar-sounding expense accounts – such as carriage inwards and carriage outwards).

An error of principle occurs when an entry occurs in the wrong type of account (for example, an asset account instead of an expense account, or entering an item of income instead of a liability, etc.).

Key term

Error of original entry: when a mistake is made transferring an amount from a source document to a subsidiary book.

Error of original entry

If the figure shown on a source document is misread this will result in the wrong amount being used for all the entries in the accounting records. Mistakes of this kind are called **errors of original entry**.

Illustration 4

Correcting an error of original entry

On 27 January 2018, an invoice was sent to a customer, KT Evans, for $978. The accounts clerk misread the figure as $798. As a result, the entry in the sales book was for the wrong figure and the following double entry was made: Dr KT Evans $798; Cr Sales $798.

Here is the journal entry to correct this error:

Journal				
Date		Details	Dr	Cr
			$	$
Jan	27	Account receivable: KT Evans	180	
		Sales		180
		Correction of error of original entry		

Here are the ledger accounts after the journal entry has been posted:

Dr	KT Evans			Cr			
			$				$
Jan	27	Sales	798				
	27	Sales	180				

Dr	Sales			Cr			
			$				$
				Jan	27	KT Evans	798
					27	KT Evans	180

Notes:

- The trial balance totals would still agree despite the error because there is a matching debit and credit entry.
- The correction requires entries to be made for the difference in the amount ($978 – $798 = $180).
- Once again, no attempt is made to correct the book of original entry.

Key term

Compensating error: where two or more errors cancel each other out.

Compensating error

A **compensating error** occurs when two (or more) unconnected errors happen to cancel each other out. Compensating errors are rather rare because they rely on coincidence.

Illustration 5

Correcting a compensating error

An accounts clerk made the following errors during September 2018:

Sept 14 The entries made for the payment of wages in cash of $760 were: Dr Wages $670; Cr Cash $760

30 The sales book was incorrectly totalled. The correct total was $5 390, but the accounts clerk entered $5 300 in the sales book and credited the sales account with $5 300 as a result.

Here is the journal entry to correct this error:

Journal				
Date		Details	Dr	Cr
			$	$
Sept	30	Wages	90	
		Sales		90
		Correction of compensating error		

Here are the ledger accounts after the journal entry has been posted:

Dr			Wages				Cr
			$				$
Sept	14	Cash	670				
	30	Sales	90				

Dr			Sales				Cr
			$				$
				Sept	30	Sales book	5300
					30	Wages	90

Error of complete reversal

An **error of complete reversal** occurs when the correct amount is entered in the correct accounts, but the debit and credit entries are switched round. Errors of reversal need a little more care when they are corrected, because, in effect, it is necessary to make two sets of entries: one pair of entries to cancel the mistake; and a second pair of entries to record the correct entries.

Illustration 6

Correcting an error of complete reversal

On 28 October 2018, the owner of a business withdrew a cheque for $400 for private use. The accounts clerk made the following entries, which are the wrong way around.

Dr			CASH BOOK (bank columns)				Cr
			$				$
Oct	28	Drawings	400				

Dr			Drawings				Cr
			$				$
				Oct	28	Bank	400

Notes:

- There is no connection between the two mistakes. By chance, the mistake in the wages account of $90 is matched by a mistake in the sales account for the same amount.

Key term

Error of complete reversal: where the account that should have been debited is credited in error and the account that should have been credited is debited.

Notes:

- The trial balance totals would still agree because there has been a matching debit and credit entry for $400.
- The journal entry is for $800 (double the amount of the error). This is necessary in order to both cancel the mistake of $400 and record the correct entry of $400.

Here is the journal entry to correct this error:

Journal				
Date		Details	Dr	Cr
			$	$
Oct	28	Drawings	800	
		Bank		800
		Correction of error of complete reversal		

Here are the accounting records after posting the journal entry:

Dr		CASH BOOK (bank columns)					Cr
			$				$
Oct	28	Drawings	400	Oct	28	Drawings	800

Dr		Drawings					Cr
			$				$
Oct	28	Bank	800	Oct	28	Bank	400

Tip

It is often quite difficult to work out the right journal entries when faced with the description of an error. You may find it helpful to quickly draw up the accounts involved and record the error. You should then find it easier to visualise the entries required to correct the mistakes.

Tip

Note that any time an entry is made on the wrong side of an account, it always requires double the amount to put the error right.

Practice questions

1. Identifying errors not revealed by a trial balance

The following errors were made by an accounts clerk during a recent financial period. In each case, identify the type of error that has occurred.

a. An invoice received from a supplier for $657 was recorded in the purchases book as being for $567.
b. A sales return for $89 from an account receivable, S McNee, was credited to the account of S McKoy.
c. Cash sales of $820 were recorded in the accounts as: Dr Cash $820, Cr Sales $800; the total of the travel expenses analysis column in the petty cash book was mis-totalled at $30 rather than the correct figure of $50.
d. A cheque counterfoil for rent, $680, was entirely overlooked.
e. The purchase of some new office equipment, $2 300, was debited to the purchases account.
f. The entries made for the payment of an account payable, L Mohammed, by cheque, $320, were: Dr Bank $320, Cr L Mohammed $320.

2. Identifying errors not revealed by a trial balance

The following errors were made by an accounts clerk during a recent financial period. In each case, identify the type of error that has occurred.

a. A till roll showed that cash sales had totalled $2 320. The entries in the accounts were Dr Cash $2 230 and Cr Sales $2 230.

b. A petty cash voucher for stationery, $18, was mislaid.
c. Discounts allowed of $28 were debited to the receivable account and credited to the discounts allowed account.
d. The payment of interest, $110, was debited to the insurance account.
e. The payment of vehicle running costs, $80, was debited to the motor vehicles account.
f. The sales returns book was mis-totalled at $170 instead of $160. Rent received from a tenant of $380 had been entered in the rent received account as $390.

3. Correcting errors with journal entries

Referring to the mistakes listed in Question 1, make journal entries to correct the errors.

4. Correcting errors with journal entries

Referring to the mistakes listed in Question 2, make journal entries to correct the errors.

Errors that are revealed by a trial balance

We have all experienced the situation where the totals of a trial balance do not agree. When this happens it means that somewhere in the accounting records a debit entry has not matched a credit entry, and maybe this has happened several times.

What is the correct procedure when trial balance totals do not agree? The answer is to make the totals agree by adding an extra amount to either the debit or credit column, as appropriate, and label this extra item **suspense account**. It will be necessary to open a suspense account in the general ledger to record this amount.

Illustration 7

Procedure where trial balance totals do not agree

An accounts clerk found that the totals of a trial balance did not agree. The trial balance was as follows.

Trial balance at 31 August 2018		
	Dr	Cr
	$	$
Total of ledger account balances	38 400	38 800

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Tip

To help remember the six errors that are not revealed by a trial balance, some students find it useful to make up a mnemonic. (A mnemonic, as you probably know, is a device to help memorization, using a word made up from the initial letters of the things you are trying to remember.) Here is a mnemonic to help you memorise these six errors:
C for commission
R for reversal
O for omission
P for principle
O for original entry
C for compensating
i.e. CROPOC.
Invent your own if you prefer.

Key term

Suspense account: a temporary account used to make the totals of a trial balance agree.

Step 1: Make the trial balance totals agree by adding an extra amount: in this case, $400 needs to be added to the debit column.

Trial balance at 31 August 2018		
	Dr	Cr
	$	$
Total of ledger account balances	38 400	38 800
Suspense account	**400**	
	38 800	38 800

Step 2: Open a suspense account in the general ledger to record this item.

Dr			Suspense		Cr
			$		$
Aug	**31**	**Balance**	**400**		

Once a suspense account is set up, it is necessary to check the accounts to find any situation where a debit entry has not been matched by a credit entry. As each of these errors is found, a correction is made in the ledger account containing the error, and a matching entry (debit or credit as appropriate) is made in the suspense account. When all the errors in matching the double-entry have been found, the suspense account should be closed, because at that point a revised trial balance would show the totals agreeing.

Notes:

- The entry in the suspense account is made on the same side as the entry in the trial balance – in this case on the debit side. Like all entries in a trial balance, the column used matches where the balance appears in the ledger account.

Illustration 8

Correcting errors in the double entries that do not match

Referring to Illustration 7, the following three errors were discovered where the double-entry did not match.

Error 1

The payment of water charges by cheque, $420, had been recorded as follows: Dr Water charges $240; Cr Bank $420.

The error is in the water charges account (the bank account is correct). So, the journal entry required to correct the mistake is as follows.

Journal			
Date	Details	Dr	Cr
		$	$
	Water charges	180	
	Suspense		180
	Correction of misposting of payment for water charges		

The ledger accounts would appear as follows when this journal entry is posted.

Dr		Water charges		Cr	
			$		$
		Bank	240		
		Suspense	**180**		

Dr			Suspense		Cr	
			$			$
Aug	31	Balance	400		**Water charges**	**180**

Error 2

The total of discounts allowed column in the cash book was **miscast** (incorrectly totalled). The correct total should have been $70, but the accounts clerk's total was $90.

The error is in the discounts allowed account. The entries for discounts allowed in the accounts receivable accounts are correct, because the individual entries in the discounts allowed column are correct. So, the journal entry required to correct the mistake is as follows.

Journal			
Date	Details	Dr	Cr
		$	$
	Suspense	20	
	Discounts allowed		20
	Correction of posting of miscast discounts allowed column		

The ledger accounts would appear as follows when this journal entry is posted.

Dr			Discounts allowed		Cr	
			$			$
		Cash book	90		Suspense	20

Dr			Suspense		Cr	
			$			$
Aug	31	Balance	400		Water charges	180
		Discounts allowed	**20**			

Error 3

Cash drawings of $240 had been correctly entered in the cash book, but no entry had been made in the drawings account.

Notes:

- Correcting this error has reduced the balance on the suspense account, which now stands at $220.
- If a revised trial balance was prepared at this stage, the gap between the totals would be $220.

Key term

Miscast: incorrectly totalled. Undercast would mean that a total is too small; overcast would mean that a total is too large.

Notes:

- The correction of this error has increased the balance of the suspense account to $240.
- If a revised trial balance was prepared at this point, the gap between the totals would be $240.

Notes:

- The correction of this entry has left the suspense account with a nil balance.
- If a revised trial balance was prepared at this stage, the totals would agree.

The error is in the drawings account (the cash book is correct). The journal entry required to correct the mistake is as follows.

Journal			
Date	Details	Dr	Cr
		$	$
	Drawings	240	
	Suspense		240
	Entries required to correct omission of entry from drawings account		

The ledger accounts would appear as follows when this journal entry is posted.

Dr	Drawings			Cr
		$		$
	Suspense	**240**		

Dr	Suspense				Cr
		$			$
Aug 31	Balance	400		Water charges	180
	Discounts allowed	20		**Drawings**	**240**
		420			420

Practice questions

5. Correcting errors involving the suspense account

An accounts clerk was unable to get the totals of a trial balance to agree. The totals were: Dr $82 500, Cr $81 100.

Subsequently, the following errors were discovered where there was a mismatch between the debit entry and credit entry:

- Error 1: cash sales of $3 640 had been correctly entered in the cash book, but had been credited to the sales account as $3 240.
- Error 2: the total of the purchases book, $700, had not been posted to the ledger account.
- Error 3: rent received of $1 700 had been correctly entered in the cash book, but had not been posted to the rent received account.
  - **a.** Prepare journal entries to correct these errors.
  - **b.** Prepare the suspense account.

6. Correcting errors involving the suspense account

An accounts clerk was unable to get the totals of a trial balance to agree. The totals were: Dr $39 480, Cr $38 620.

Subsequently, the following errors were discovered where there was a mismatch between the debit entry and credit entry:

- Error 1: the total of the discounts received column in the cash book of

$720 had not been posted to the discounts received account.
- Error 2: the sales returns book had been undercast by $90.
- Error 3: the payment of wages in cash, $980, had been correctly entered in the cash book, but had been posted to the debit of the wages account as $1 210.
  a. Prepare journal entries to correct these errors.
  b. Prepare the suspense account.

7. Correcting errors involving the suspense account where the difference in the trial balance totals is unknown

The totals of a business's trial balance failed to agree. Subsequently the following errors were discovered:
- Error 1: a cheque received from an account receivable of $360 had been correctly entered in the cash book, but had been posted to the receivable account as $630.
- Error 2: the total of the postage column in the petty cash book, $70, had not been posted to the ledger account.
- Error 3: the purchase returns book had been undercast by $380.
  a. Prepare journal entries to correct these errors.
  b. Prepare the suspense account and identify the original difference in the trial balance totals.

8. Correcting errors involving the suspense account where the difference in the trial balance totals is unknown

The totals of a business's trial balance failed to agree. Subsequently the following errors were discovered:
- Error 1: the sales book had been overcast by $410.
- Error 2: the payment of rent by cheque, $730, had not been posted from the cash book.
- Error 3: the total of the discounts allowed column in the cash book of $110 had been posted to the discounts allowed account as $100.
  a. Prepare journal entries to correct these errors.
  b. Prepare the suspense account and identify the original difference in the trial balance totals.

9. Correcting errors, some of which affect the suspense account

When Vanessa Spencer prepared her business's trial balance on 31 October 2018 the totals failed to agree. The total of the debit column was $178 440, whereas the total of the credit column was $176 970.

The accounting records were checked and the following errors were discovered:
- Sales returns of $370 had been credited to the account of Joseph Wright instead of Joshua Wright.

- The receipt of $830 from an account receivable, T Mungroo, had been correctly entered in the cash book but had not been posted to the receivable account.
- The total of the general expenses analysis column in the petty cash book, $40, had not been posted to the general ledger.
- A cheque for $780 in payment of the supplier, JK Samaroo, had been entered in the accounts as $870.
- The total of the purchase returns book, $680, had not been posted to the purchase returns account.
- A payment by cheque for insurance, $350, had been debited in the cash book and credited to the insurance account.
  a. Identify whether or not each error would be revealed by the trial balance.
  b. Prepare journal entries to correct the errors.
  c. Prepare the suspense account.

10. Correcting errors, some of which affect the suspense account

The totals of a business's trial balance did not agree. The totals were: Dr $423 890; Cr $425 090.

The following errors were found:

- The total of the discounts received column in the cash book had been overcast by $300.
- A sale on credit to Steven Taylor, $830, had not been posted from the sales book to the customer's account.
- A cash receipt for stationery, $40, had been mislaid and no entries had been made in the accounts.
- The total of the sales returns book, $470, had been posted to the sales returns account as $740.
- The payment of water charges by cheque, $340, had been correctly entered in the cash book, but had not been posted to the water charges account.
- The entries made for cash sales of $690 were: Dr Sales $690, Cr Cash $690.
  a. Identify whether or not each error would be revealed by the trial balance.
  b. Prepare journal entries to correct the errors.
  c. Prepare the suspense account.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Correcting draft profit figures

Errors are not always easily found and it can take some time to trace mistakes and correct them. As a result, it is possible that a draft end-of-year financial statement might be prepared that contains some incorrect information. When this happens, it will be necessary to

prepare a statement correcting the draft profit as soon as any errors are found. In these situations, care has to be taken to distinguish between errors that affect the calculation of profits and those which do not.

Errors that affect profits

Errors that affect items that are recorded in the income statement normally affect the draft profit figure when they are corrected. For example, if the figure for sales was understated in the income statement, the draft profit should be increased when the error is corrected. Occasionally, errors in an income statement may not affect draft profit. For example, if carriage inwards was recorded in the profit and loss section rather than the trading account section of an income statement by mistake, this would not affect the draft profit, because the cost has been included in the calculation of profit (although in the wrong place).

Errors that do not affect profits

If an error affects an item that does not appear in the income statement, then its correction will not affect the draft profit. For example, if the cash balance is miscalculated this will not affect the draft profit, because the cash balance is not shown in the income statement. If non-current assets were understated, this would not directly affect the calculation of profit for the same reason. However, it would be necessary to check if depreciation has been miscalculated as a result of this error, because depreciation does affect the calculation of profit.

Illustration 9

Correcting a draft profit figure

Best Grocery Store's draft income statement for the year ended 31 December 2018 showed a draft profit of $68 300. However, it was found that errors had been made in the accounts, some of which affected the calculation of the draft profit. The errors were as follows:

- Insurance, $500, had been omitted from the income statement.
- Sales had been overstated by $360.
- Accounts payable had been totalled incorrectly at $14 360 instead of $15 360.
- Rent, $440, had been prepaid at the year end, but this had been overlooked when preparing the income statement.
- Closing inventory had been understated by $600 when preparing the income statement.
- Discounts allowed, $450, were added to the gross profit in the income statement rather than deducted.

Tip

When correcting some mistakes involving items shown in an income statement, great care needs to be taken, as it is not always clear how the correction will affect the profit calculation. For example, if the closing inventory is understated, profit will increase when a correction is made. How would a mistake in purchase returns affect the profit calculation?

The answer is not that easy to work out! Where there is a problem working out the answer, an experimental income statement should be drawn up, so that the effect of correcting errors can be visualised.

Don't forget that if an item is placed on the wrong side in the income statement, it will require a correction of double the amount.

Here is a table which sets out the effect (if any) of correcting these errors on the draft profit.

Best Grocery Store Correction of draft profit for the year ended 31 December 2018	
	$
Draft profit	68 300
Correction of omission of insurance	(500)
Correction of overstated sales	(360)
Correction of mis-totalled accounts payable	no effect
Correction of overlooked prepaid rent	440
Correction of understated closing inventory	600
Correction of discount allowed error	(900)
Corrected profit	**67 580**

Notes:

- Figures shown in brackets are negative.
- It is good practice to present the corrections in a formal statement such as in the illustration. You will notice the proper title, the clear labelling of each item, and the fact that the statement starts with the draft figure and ends with the clearly labelled correct profit figure.
- Item 3 has no effect, because the figure for accounts payable does not appear in an income statement.
- Item 4 increased profit, because if the prepayment had been dealt with correctly, rent would have been less and profit more.
- Item 5: the more closing inventory a business has, the greater the gross profit. This is because the figure for closing inventory reduces the cost of sales figure, and the smaller the cost of sales the greater the gross (and therefore final) profit figure.
- Item 6: in effect, discounts allowed was recorded on the "wrong side" of the income statement, so it is necessary to double the amount to correct the mistake.

Practice questions

11. Correcting a draft profit figure

Sharon Lee recently prepared the end-of-year income statement for her business. The income statement showed a draft profit of $89 500 for the year ended 30 November 2018. However, the following errors in the accounting records were discovered:

- No entry was made for depreciation of equipment, $3 000, in the income statement.
- The purchases figure was understated by $400 in the income statement.
- The loan account was incorrectly balanced. The balance brought down should have been $11 500, not $10 500.
- Wages due but unpaid, $450, was overlooked when preparing the income statement.
- Carriage outwards, $720, was recorded in the trading section of the income statement.
- The expense "rent $4 700" was added to the gross profit rather than deducted.
- Sales returns of $3 280 was overlooked when preparing the income statement.

Prepare a statement showing the effect of correcting these errors on the draft profit for the year ended 30 November 2018.

12. Correcting a draft profit figure

The draft income statement for the year ended 30 September 2018 for Zero Stores showed a draft profit of $132 850. However, the following errors were found in the accounting records:

- General expenses totalling $2 140 had been entirely omitted from the income statement.
- Depreciation had been charged on the business's motor vehicles (cost $74 000) at the rate of 20% per annum. However, the correct rate should have been 25%.
- Sales had been overstated by $710 when preparing the income statement.
- The balance of a receivable account, $1 240, had been brought down as $2 140.
- Discounts received, $480, had been added to sales in the trading section of the income statement.
- Rent, $630, was due but unpaid at the year end. This detail had been overlooked.
- Purchase returns were overstated by $300 when preparing the income statement.

Prepare a statement showing the effect of correcting these errors on the draft profit for the year ended 30 September 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

7.2 Control accounts

Objectives

By the end of this unit you will be able to:

- prepare an accounts receivable control account
- prepare an accounts payable control account
- explain the benefits and limitations of control accounts.

As you know, the accounts of payables are kept in a purchases ledger and the accounts of receivables are kept in a sales ledger. In the books of account of some businesses, these ledgers can be very extensive and include many personal accounts. You can imagine how useful it would be if it were possible to check the accuracy of these two ledgers with simple processes that only take a few minutes to carry out. Fortunately, there are such processes, called control accounts, which are going to be examined in this unit.

Key term

Accounts receivable control account: a process for checking entries in the sales ledger.

How does an accounts receivable control account work?

The idea behind any form of control account is that it checks part of the accounting system (in this case, it is the **accounts receivable control account** checking the sales ledger) and that it is made up of totals of all the transactions which have been posted to that part of the accounting system (in this case, transactions that affect accounts receivables).

Tip

Sometimes the accounts receivable control account is called the "sales ledger control account".

Illustration 10

The idea behind an accounts receivable control account

Say you were given the following information:

- total accounts receivable at 1 January was $10 000
- total credit sales for the year was $100 000
- total amounts received from accounts receivable was $95 000.

It would only take a moment to work out that the total of all the accounts receivable balances at 31 December should be $15 000.

If you put this information in account form, it would look like this.

Dr			Cr	
		$		$
Opening balance		10 000	Receipts	95 000
Credit sales		100 000	Balance c/d	15 000
		110 000		110 000
Balance b/d		15 000		

This is a simple version of an accounts receivable control account.

The account shows that the total of receivables accounts should be $15 000. You could then check with the sales ledger and see if all the individual balances on the receivables accounts ledger have been correctly prepared.

Link

However, see page 343 for some possible limitations of control accounts.

You can see from the illustration that an accounts receivable control account looks rather like a receivable's account. Anything that you would debit in a receivable's account is also debited in an accounts receivable control account; anything that you would credit in a receivable's account is also credited in an accounts receivable control account.

Like many checks on the accounting system, control accounts are not normally part of the double-entry system. They are usually regarded as "memorandum records". There are exceptions to this, however, as discussed at the end of this unit.

Preparing a more detailed accounts receivable control account

To check a sales ledger, you need to make sure that the accounts receivable control account contains the totals of all the transactions that have affected accounts receivables. The table below shows those transactions and also where you would obtain the totals you need to prepare the accounts receivable control account.

Transactions	Source of information
Total credit sales	Sales book
Total receipts	Cash book
Total discounts allowed	Cash book
Total sales returns	Returns inwards book
Total bad debts	General journal

Illustration 11

Preparing an accounts receivable control account

At the end of March 2018, the owner of a business wished to check the accuracy of the sales ledger.

Notes:

- An accounts receivable control account always resembles an accounts receivable account.
- Because control accounts use total information, they are sometimes called "total accounts" rather than control accounts.
- The accounts receivable control account tells you that the total of all accounts receivable at 31 March should be $16 000. This should correspond to the total of all the balances in the sales ledger at this date.

The following information was obtained relating to March 2018.

Transactions	Source of information	$
Total of receivables balances on 1 March	Control account for February	12 000
Total credit sales	Sales book	83 000
Total receipts	Cash book	71 000
Total discounts allowed	Cash book	3 000
Total sales returns	Returns inwards book	4 000
Total bad debts	General journal	1 000

Here is the control account for March 2018.

Dr		Accounts receivable control account					Cr
			$				$
March	1	Balance b/d	12 000	March	31	Receipts	71 000
	31	Credit sales	83 000		31	Discounts allowed	3 000
					31	Sales returns	4 000
					31	Bad debts	1 000
					31	Balance c/d	16 000
			95 000				95 000
April	1	Balance b/d	16 000				

If the accounts receivable control account closing balance and the total of the balances in the sales ledger do not agree, then this would indicate that there is a problem in the accounting system. Here are some possible reasons why the two may not agree.

An error may have been made in a ledger account; perhaps the sales ledger accounts clerk has:

- misread a figure in the sales book and entered the incorrect figure in a receivables account (for example, in the sales book the sale is recorded as $997, but has been posted as $979)
- overlooked an entry in the returns inwards book, and omitted this sales return from the receivable's account
- posted a discount allowed, which is correctly shown in the cash book, to the wrong side of a receivable's account.

Alternatively, perhaps the accounts receivable control account is not correct. This could happen if:

- there is an error in the total of one of the relevant books of original entry because the entries have not been added up correctly
- the accounts clerk who has prepared the control account has omitted to include one of the totals
- the control account has not been balanced correctly and is arithmetically incorrect.

Practice questions

13. Preparing a simple accounts receivable control account

Prepare an accounts receivable control account for June 2018 from the following information.

Transactions	Source of information	$
Total of receivables balances on 1 June	Control account for May	9000
Total credit sales	Sales book	37000
Total receipts	Cash book	31000
Total discounts allowed	Cash book	3000
Total sales returns	Returns inwards book	5000
Total bad debts	General journal	1000

14. Preparing a simple accounts receivable control account

Prepare an accounts receivable control account for December 2018 from the following information.

Transactions	Source of information	$
Total of receivables balances on 1 December	Control account for November	11400
Total credit sales	Sales book	56100
Total receipts	Cash book	48300
Total discounts allowed	Cash book	2700
Total sales returns	Returns inwards book	1900
Total bad debts	General journal	300

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Some more accounts receivable control account entries

Illustration 11 included most of the likely totals for transactions that should be shown in a control account, but there are some other possibilities that occur less often.

Dishonoured cheques

Accounts receivable often pay their accounts by cheque. The cheque will then be paid into the business's bank account, the cash book debited and the receivable's account credited. Usually that is the end of the matter. However, just occasionally the cheque will not be accepted by the bank because the receivable has no money in their account. Technically, the cheque has been **dishonoured**. When this happens it will be necessary to cancel the entries made for the receipt of the cheque.

Key term

Dishonoured cheque: a cheque that a bank will not accept for payment, because the payee (person writing the cheque) does not have enough money in their account to cover the amount being paid. It is also sometimes called a "returned" cheque.

Illustration 12

Recording dishonoured cheques

The following receivable's account (for customer John Brown) appeared in the sales ledger of the business owned by Monique Fray.

Dr		John Brown			Cr		
			$				$
April	1	Balance	3 600	April	27	Bank	3 600

The account shows that John Brown paid the amount due on 27 April.

However, on 10 May Monique was informed by her bank that John Brown's cheque was dishonoured.

Monique cancelled the entries for John Brown's cheque as follows.

Dr	CASH BOOK (bank columns)			Cr			
			$				$
				May	10	John Brown (dishonoured cheque)	3 600

Dr	John Brown			Cr			
			$				$
April	1	Balance	3 600	April	27	Bank	3 600
May	10	Bank (dishonoured cheque)	3 600				

As you know, any entry in an accounts receivable account must also be reflected in the accounts receivable control account. So the total of all dishonoured cheques (obtained from the cash book) should be recorded in the accounts receivable control account as follows.

Dr	Accounts receivable control account		Cr
		$	$
	Dishonoured cheques	3 600	

Credit balances on sales ledger accounts

Occasionally a receivable's account will have a credit balance. This may sound rather strange at first, but can happen if a customer overpays their account.

If any sales ledger accounts have credit balances, this fact needs to be reflected when the accounts receivable control account is prepared. Illustration 13 shows how this is done.

Illustration 13

Accounts receivable account with a credit balance

Jody Dass is a credit customer of Home Developments Ltd. The following transactions took place during June 2018:

June 12 Goods sold to Jody, $850
29 Jody paid the amount due by cheque

At this stage, the receivables account would look like this:

Dr				Jody Dass				Cr
			$					$
June	12	Sales	850	June	29	Bank		850

The account is cleared at this stage. However, on 30 June, Jody noticed that some of the goods sold to her on 12 June with a value of $120 were faulty. It would now be necessary to make an entry for sales returns.

The account would now look like this.

Dr				Jody Dass				Cr
			$					$
June	12	Sales	850	June	29	Bank		850
					30	Sales returns		120

When the account is balanced it would appear as follows.

Dr				Jody Dass				Cr
			$					$
June	12	Sales	850	June	29	Bank		850
	30	Balance c/d	120		30	Returns inwards		120
			970					970
				July	1	Balance b/d		120

In effect, Jody has overpaid and her account temporarily shows a credit balance. Home Developments Ltd may have to send Jody a cheque to refund the $120 that has been overpaid.

Interest charged on overdue accounts

One way of trying to encourage credit customers to pay on time is to charge interest on overdue accounts. The double entry for any interest charged should be:

- debit the receivable's account
- credit the interest received account.

A journal entry would be required to initiate these entries.

The total of interest charged to customers will need to be shown in the accounts receivable control account.

Key term

Contra entry: when a business deals with another business or organization as both a customer and supplier, the balance of the two accounts are set off against one another to find the net amount due. (Contra entries are sometimes referred to as "set offs".)

Contra entries (set offs)

A business could find that one of its suppliers is also one of its customers. For example, a business that provides an office cleaning service could find that it purchases cleaning materials from one of its customers. Where this situation arises it is usual for only the net amount due to be paid. To find the net amount due it is necessary to set off the balance of the personal accounts concerned against each other. This process results in what is often referred to as a **contra entry**.

Illustration 14

Contra entries

During June, Citycleaners Services purchased cleaning materials on credit from Bestsupplies Ltd, value $280. Citycleaners Services also charged Bestupplies Ltd $170 for cleaning the company's offices.

The net amount due in June is $110. In this case, Citycleaners Services owes Bestsupplies this amount.

Step 1: In the books of Citycleaners Services the personal account before settling the amount due will be as follows:

Dr	PURCHASES LEDGER – Bestsupplies Ltd			Cr	
			$		$
				June Cleaning materials	280

Dr		SALES LEDGER – Bestsupplies Ltd		Cr
			$	$
June	12	Sales	170	

Step 2: The balance in the sales ledger will be transferred to the purchases ledger (i.e. the customer's account balance will be set off against the supplier's account balance). This would require an entry in the general journal.

Journal			
Date	Details	Dr	Cr
		$	$
June	Bestsupplies Ltd (purchases ledger)	170	
	Bestsupplies Ltd (sales ledger)		170
	Setting off balance of customer account against supplier account		

Step 3: Post the journal entry to the personal accounts

Dr	PURCHASES LEDGER – Bestsupplies Ltd			Cr	
			$		$
June	Contra entry with sales ledger		170	June Cleaning materials	280

Dr		SALES LEDGER – Bestsupplies Ltd		Cr			
			$				$
June	12	Sales	170	June		Contra entry with purchases ledger	170

Step 4: The purchases ledger account now shows that on balance $110 is owing to the supplier.

Illustration 15

Accounts receivable control account including more unusual entries

On 30 November, an accounts receivable control account was to be prepared from the following information:

	$
Sales ledger balances at 1 November 2018:	
debit	16350
credit	490
Totals taken from books of original entry:	
credit sales	43270
sales returns	1160
receipts from receivables	37240
discounts allowed	680
dishonoured cheques	300
interest charged on overdue accounts	220
bad debts written off	510
contra entry with purchases ledger	**300**
Sales ledger balances at 30 November 2018:	
debit	?
credit	130

Here is the accounts receivable control account. The more unusual items have been highlighted.

Dr		Accounts receivable control account		Cr			
			$				$
Nov	1	Opening balance	16350	Nov	1	Opening balance	490
	30	Credit sales	43270		30	Sales returns	1160
	30	Dishonoured cheques	300		30	Receipts	37240
	30	Interest charges	220		30	Discounts allowed	680
	30	Closing balance c/d	130		30	Bad debts	510
					30	**Contra entry**	**300**
					30	Closing balance c/d	**19890**
			60270				60270
Dec	1	Balance b/d	**19890**	Dec	1	Balance b/d	130

Notes:

- The list of information includes an opening credit balance of $490 and a closing credit balance of $130. This is a reference to a balance brought down. So when entering this information in the control account, it is necessary to start with a debit balance of $130 to carry down. As a result, when this balance is brought down it will appear on the credit side.

Illustration 15 gives just four examples of some of the more unusual entries you might have to make in an accounts receivable control account. If you come across any other examples, the right approach is to work out on which side of the receivable's account the transaction would have been recorded. This will then also tell you on which side of the control account to make an entry.

Practice questions

15. Preparing an accounts receivable control account including more unusual entries

The following information is to be entered in a business's accounts receivable control account for January 2018:

	$
Sales ledger balances at 1 January 2018:	
debit	7 400
credit	230
Totals for the month:	
credit sales	27 480
sales returns	620
receipts from receivables	21 930
discounts allowed	330
bad debts	80
interest charged on overdue accounts	70
dishonoured (returned) cheques	190
contra entries with purchases ledger	420
Sales ledger balances at 31 January 2018:	
debit	?
credit	390

a. Prepare the accounts receivable control account for January 2018.

b. The sales ledger clerk reported that the total of debit balances in the sales ledger on 31 January 2018 was $11 920. What conclusions should you draw from this information?

16. Preparing an accounts receivable control account including more unusual entries

The following information is to be entered in a business's accounts receivable control account for October 2018.

	$
Sales ledger balances at 1 October 2018:	
debit	11 580
credit	490
Totals for the month:	
credit sales	38 560
sales returns	2 210
receipts from receivables	33 400
discounts allowed	820
bad debts	240
refunds paid to receivables	490
interest charged on overdue accounts	90
dishonoured (returned) cheques	590
contra entries with purchases ledger	210
Sales ledger balances at 31 October 2018:	
debit	?
credit	540

a. Prepare the accounts receivable control account for October 2018.

b. The sales ledger clerk reported that the total of debit balances in the sales ledger on 31 October 2018 was $13 690. What conclusions should you draw from this information?

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Preparing an accounts payable control account

The purchases ledger can also be checked using the system of taking totals from the books of original entry. The table below lists the most likely transactions to affect accounts payable and the source of information for preparing the **purchases ledger control account**.

Transactions	Source of information
Total credit purchases	Purchases book
Total payments	Cash book
Total discounts received	Cash book
Total purchase returns	Returns outwards book

Key term

Purchases ledger control account: a process for checking entries in the purchases ledger.

Illustration 16

Preparing an accounts payable control account

At the end of May 2018, the owner of a business wished to check the accuracy of the purchases ledger.

Notes:

- An accounts payable control account always resembles a payable's account.
- This account is sometimes known as a "total payables account".
- The purchases ledger control account tells you that the total of all accounts payable at 31 May should be $20 000. This should correspond to the total of all the balances in the purchases ledger at this date.

The following information was obtained relating to May 2018.

Transactions	Source of information	$
Total of payables balances on 1 May	Control account for April	23 000
Total credit purchases	Purchases book	61 000
Total payments	Cash book	57 000
Total discounts received	Cash book	2 000
Total purchases returns	Returns outwards book	5 000

Here is the control account for May 2018.

Dr **Purchases ledger control account** **Cr**

			$				$
May	31	Bank	57 000	May	1	Opening balance	23 000
	31	Discounts received	2 000		31	Purchases	61 000
	31	Purchases returns	5 000				
	31	Balance c/d	20 000				
			84 000				84 000
				June	1	Balance b/d	20 000

Practice questions

17. Preparing a simple purchases ledger control account

Prepare an accounts payable control account for the month ended 31 July 2018 from the following information.

Transactions	Source of information	$
Total of payables balances on 1 July	Control account for June	17 400
Total credit purchases	Purchases book	41 500
Total payments	Cash book	33 200
Total discounts received	Cash book	2 700
Total purchases returns	Returns outwards book	3 900

18. Preparing a simple purchases ledger control account

Prepare an accounts payable control account for the month ended 31 March 2018 from the following information.

Transactions	Source of information	$
Total of payables balances on 1 March	Control account for February	53 480
Total credit purchases	Purchases book	185 920
Total payments	Cash book	161 310
Total discounts received	Cash book	4 370
Total purchase returns	Returns outwards book	11 990

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Some more purchases ledger control account entries

Here are some other situations that might affect an accounts payable control account:

Debit balance on a payable's account

Occasionally a credit supplier's account will have a debit balance because the supplier has been overpaid. The purchases ledger control account will need to reflect any debit balances at the beginning and end of the period under review.

Interest charged by a supplier

Some suppliers might charge interest if their accounts are not paid on time. Any interest charge will increase the amount due to the supplier. Interest charges like these will need to be shown in the purchases ledger control account.

Contra entries

Where a supplier is also a customer of a business, it may be necessary to set off the personal accounts to establish a net amount owing to the supplier, or owed by the supplier. (See Illustration 14 as an example.)

Tip

Control accounts can be part of the double-entry system.

Usually control accounts are memorandum records – in other words, they are not part of the double-entry records. However, some businesses prefer to switch things round, so that the purchases and sales ledgers are memorandum records (outside the double-entry system) and the control accounts become part of the double-entry record.

Illustration 17

Purchases ledger control account including more unusual entries

On 31 July, an accounts payable control account was to be prepared from the following information:

	$
Purchases ledger balances at 1 July 2018:	
debit	**340**
credit	9680
Totals taken from books of original entry:	
credit purchases	41470
purchases returns	820
payments to payables	36450
discounts received	990
interest charged on overdue accounts	**210**
contra entries with sales ledger	100
Purchases ledger balances at 31 July 2018:	
debit	**180**
credit	?

The more unusual items have been highlighted. The purchases ledger control account follows.

Tip

In some questions on control accounts, you have to select the right information to be used in the answer. Remember that, when you make your selection, the only items you require are transactions that would have affected an individual payable's or receivable's account. A common mistake, for example, is to include cash sales in the accounts receivable control account – cash sales do not, of course, affect accounts receivable.

Dr			Purchases Ledger Control Account				Cr
			$				$
July	1	Balance b/d	**340**	July	1	Balance b/d	9 680
	31	Bank	36 450		31	Purchases	41 470
	31	Discounts received	990		31	Interest charges	**210**
	31	Purchases returns	820		31	Balance c/d	180
	31	Contras	100				
	31	Balance c/d	12 840				
			51 540				51 540
Aug	1	Balance b/d	**180**	Aug	1	Balance b/d	12 840

If you come across any other unusual items, remember to think about which side of a payable's account the entry for the transaction should have been made. The entry in the purchases ledger control account will also be on that side.

Practice questions

19. Preparing an accounts payable control account including more unusual entries

The following information is to be entered in an accounts payable control account for October 2018:

	$
Purchases ledger balances at 1 October 2018:	
debit	830
credit	31 620
Totals for the month:	
credit purchases	82 880
purchases returns	5 370
payments to payables	75 060
discounts received	2 240
interest charged on overdue accounts	250
contra entries with sales ledger	370
Purchases ledger balances at 31 October 2018:	
debit	990
credit	?

a. Prepare the purchases ledger control account for October 2018.

b. The purchases ledger clerk reported that the total of credit balances in the purchases ledger on 31 October 2018 was $31 140. What conclusions should you draw from this information?

20. Preparing an accounts payable control account including more unusual entries

The following information is to be entered in an accounts payable control account for February 2018:

	$
Purchases ledger balances at 1 February 2018:	
debit	478
credit	11475
Totals for the month:	
credit purchases	53660
purchase returns	5097
payments to payables	47478
discounts received	2113
refunds received from payables	309
interest charged on overdue accounts	138
contra entries with sales ledger	590
Purchases ledger balances at 28 February 2018:	
debit	592
credit	?

a. Prepare the purchases ledger control account for February 2018.

b. The purchases ledger clerk reported that the total of credit balances in the purchases ledger on 28 February 2018 was $10 418. What conclusions should you draw from this information?

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Control accounts: benefits and limitations

Control accounts are very useful for the following reasons:

- Check on the sales and purchases ledgers: control accounts can provide a regular and quick check on the arithmetical accuracy of the sales and purchases ledgers.
- Providing information about total accounts receivable and total accounts payable: control accounts can be prepared quickly, so they are a useful source of information about total receivables and total payables when preparing a trial balance or the end-of-year financial statements. In a manual system, it can take some time to work out and total the balances on all the individual personal accounts.
- Helping prevent fraud: the work of the individual(s) who maintain the sales and purchases ledgers will be checked regularly by a more senior person in the accounting team. This degree of scrutiny can help reduce the possibility of fraud taking place. It should mean that any fraudulent activity is more likely to be discovered.

However, it is important to realise that, just like the trial balance, there are some limitations. Some errors will not be revealed by a control account. It is possible for the closing balance on a control account to match the total of the balances in the ledger, but there could still be errors that have not been detected. Here are some examples of errors that control accounts cannot reveal:

- Error of commission: control accounts provide information about total receivables and total payables, so they cannot detect when an entry has been made for the correct amount and on the correct side but in the wrong personal account.
- Error of original entry: if an incorrect figure has been used in both the book of original entry and in the personal account, the control account balance will still match the total of the personal accounts.
- Error of omission: if a transaction has been completely overlooked, this will have the same impact on the control account and on the personal account.

7.3 The bank reconciliation statement

Objectives

By the end of this unit you will be able to:

- explain some terms used in bank statements
- prepare simple bank statements
- compare cash book (bank columns) with the matching bank statement to identify differences
- update a cash book using information overlooked or not available until the bank statement was available
- prepare a statement reconciling the updated cash book balance with that shown on the bank statement
- prepare bank reconciliation statements when the bank balance is overdrawn
- explain the benefits of preparing bank reconciliation statements.

In this unit you will learn how to check that a business's record of its bank transactions as recorded in the cash book is accurate and up to date. The process involves comparing the bank columns in the business's cash book with the relevant **bank statement** issued by the business's bank. First, it is important to understand how a bank statement works.

Key Term

Bank statement: a copy of a customer's bank account, sent to the customer at regular intervals.

How do bank statements work?

It is very important to realise that from the bank's point of view each customer's account (assuming it has a positive balance) is a liability account. The reason is that any funds in an account do not belong to the bank. In effect, the bank owes these funds to the customer; hence the balance is a liability. However, if the account becomes overdrawn, then the customer owes the bank the amount of the overdrawn balance, and at that point the account is one of the bank's assets.
A bank statement is a copy of the bank's record of a customer's account that is sent to the customer at regular intervals – perhaps on a monthly basis – or on request.

Link

Banks keep computerised records of each customer's account using the running balance technique that was illustrated in Chapter 2.

Illustration 18

Preparing a bank statement

Here are some straightforward transactions affecting the current account of a business called Beachspray that banks with Anybank plc:

March 1 Balance at bank, $800
3 Paid insurance, $360 (cheque number 303472)
5 Paid telephone charges, $230 (payment made by direct debit)

11 Drawings by cheque, $250 (cheque number 303473)
18 Banked cash takings, $890
21 Paid rent, $280 (payment made by standing order)
24 One of the business's accounts receivable (M Lee) paid $480 directly into Beachspray's account (using credit transfer facility)
27 Bank deducted charges of $80

Notes:

- When the account has a positive balance it is described as Cr (a liability) – this is the balance owed by the bank to the business.
- When the account has a negative balance it is described as Dr (an asset) – this is the balance owed by the business to the bank.

You will notice that there are some new terms used in this list of transactions. These are explained further on in this unit.

Here is the bank statement recording these details.

Anybank plc
Bank statement for Beachspray

Date		Details	Dr	Cr	Balance	
			$	$	$	
March	1	Balance			800	Cr
	5	303472 General Assurance plc	360		440	Cr
	5	DD Regional Telecoms plc	230		210	Cr
	14	303473	250		40	Dr
	18	Sundries		890	850	Cr
	21	SO Landward Properties plc	280		570	Cr
	24	Credit transfer – Michael Lee		480	1050	Cr
	27	CHR	80		970	Cr

This is the situation on 14 March.

- Additions to the balance are recorded in the credit column; deductions from the balance are recorded in the debit column. The account works in this way because it is a liability account.
- Banks record information in the details column in a number of ways. For example:
  - cheque numbers are identified
  - "sundries" is used when money is paid by the business into the account
  - "CHR" is an abbreviation of charges
  - DD, SO and Credit transfer are banking facilities that are explained below.
- Banks use a variety of descriptions and abbreviations; the above is just an example of the entries that could be made.
- The bank statement shows that on 27 March Beachspray has a positive balance of $970 at the bank.

Some specialist banking facilities explained

Direct debit

A banking facility that enables the bank's customer to give the bank the authority to make payments on its behalf to particular organizations who request payment. In the illustration, the bank's customer (Beachspray) has instructed the bank to pay its telephone charges automatically whenever the telephone company (Regional Telecoms plc) requests payment. Beachspray would set an upper limit to the amount that can be paid. Because the payment is made automatically by the bank, the customer (Beachspray) may not be aware that the payment has happened until the bank statement is received. The abbreviation DD has been used by Anybank plc to indicate a **direct debit** payment.

Standing order

A banking facility that enables the bank's customer to give the bank the authority to make regular payments of an agreed amount to named organizations. In the illustration, the bank has paid Beachspray's rent of $280 to the company owning the property (Landward Properties plc). This payment will be made automatically by the bank, say every month, and the payment will always be $280, until Beachspray changes its instructions to the bank. Again, it is possible that the bank's customer will forget about the **standing order** payment, because it is automatic, until the bank statement arrives and acts as a reminder. The abbreviation SO has been used by Anybank plc to indicate a standing order payment.

Credit transfer

It is possible for a business's customer to pay the amount they owe directly into that business's bank account using a facility known as a **credit transfer**. In the illustration, one of Beachspray's customers (Michael Lee) has paid Beachspray $480 by using this facility. In fact, what has happened is that Michael Lee has authorised his bank to make this payment. Michael Lee's bank has then made an automatic transfer of funds from Michael Lee's account to Beachspray's account held by Anybank plc. This automatic transfer of funds between banks is faster, more secure and generally more convenient for all concerned. It is quite likely that the bank statement will act as a notification to those responsible for Beachspray's accounts that this credit transfer has occurred. (Banks have now developed very sophisticated means of transferring funds between banks and between customer's accounts.)

Key terms

Direct debit: where authority is given to a bank by one of its customers to make payments on its behalf to another organization. The amount paid is that requested by that organization up to a specified limit.

Standing order: where a bank's customer gives instructions for the automatic payment to another organization of a fixed amount at regular intervals.

Credit transfer: the automatic transfer of funds into a business's bank account by one of the business's customers.

Key terms

Bank charges: payments deducted automatically from a current account at regular intervals as a payment to the bank for operating the account.

Bank charges

At regular intervals, banks charge their business customers for operating their current accounts. **Bank charges** are usually based on the number of transactions that have occurred and will include interest on any overdrawn balances. The bank's customer will not be aware of the amount of the charge until the bank statement is received. In the illustration, Beachspray's accounts team will only realise that the bank has charged $80 for operating their current account when the March bank statement is received.

Practice questions

21. Preparing a bank statement

Jody Edwards is the owner of Jody's Jewellery Store. Her business banks with Anybank plc. The following information is available about the business's current account for the month of May 2018.

Date		Transaction details	Amount $
May	1	Balance of cash at bank (positive)	1 400
	4	Payment of general expenses by cheque (number 27204)	320
	8	Bank made direct debit payment for electricity charges to Interstate Power plc	670
	12	Payment of supplier, Latoya Fray, by cheque (number 27205)	820
	15	Cash takings paid into the bank account	1 780
	20	Bank made standing order payment for rent to Ford Holdings plc	480
	24	Credit transfer of funds from customer, Smartjewels Ltd	950
	29	Bank charges deducted	110

Use these details to prepare Jody's Jewellery Store's bank statement for May 2018. Use the running balance style of presentation and use appropriate terms and abbreviations in the details column of the bank statement.

22. Preparing a bank statement

The following details for July 2018 are available concerning the current account of the business owned by Irvin Pitts, called Pitts Fishing Supplies.

Use these details to prepare the Pitts Fishing Supplies' bank statement for July 2018. Use the running balance style of presentation and use appropriate terms and abbreviations in the details column.

Date		Transaction details	Amount $
July	1	Balance of cash at bank (positive)	930
	6	Payment of supplier, TMT Ltd, by cheque (number 787891)	640
	11	Drawings made by cheque (number 787892)	310
	12	Bank made standing order payment for loan repayment to Quality Finances plc	450
	17	Cash takings paid into the bank account	1370
	19	Credit transfer of funds from customer, Nana Retail	590
	23	Bank made direct debit payment for telephone charges to Telecoms plc	220
	28	Bank charges deducted	140

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Checking a cash book (bank columns) against a bank statement

When a business's accounts team receives a bank statement, all the details in the bank statement will be checked carefully against the records made in the bank columns of the cash book. It is unlikely that the two records will match exactly. There are two main reasons why this is so: timing differences and missing information.

Timing differences affecting the bank statement

It takes time for banks to process transactions. As a result, some cheques paid by the business towards the end of the period may not appear on the bank statement. It is also possible that the recipient of a cheque may have taken some time to pay the cheque into their own current account, adding to the delay. Cheque payments made by a business which do not appear on a bank statement are called **unpresented cheques**. These cheques are very likely to appear on the next bank statement unless, of course, the recipient loses the cheque or fails to pay it into their bank account.

In the same way, money paid into the bank by a business may not appear on the bank statement for a few days while the transaction is processed by the bank. So details on paying-in slips completed towards the end of a period may be missing from the bank statement. Money paid into a current account but which has not yet appeared on the bank statement is usually referred to as a **late lodgment** (but sometimes as amounts not yet credited or as outstanding lodgments). These amounts will appear on the next period's bank statement.

Key terms

Unpresented cheque: a cheque that has not been cleared by the bank and not yet recorded on a business's bank statement (as a debit entry).

Late lodgment: amount paid into a business's bank which has not yet been recorded on the bank statement (as a credit entry).

Information missing from the cash book

Although the cash book will have been prepared with great care, it is inevitable that some details will be missing because of an oversight by

a member of the accounts team or because the information was not available until the bank statement arrived. Here are some common examples:

- oversights: automatic payments made by the bank that have been overlooked or forgotten (for example, standing order and direct debit payments); receipts from customers made by credit transfer
- information not available: bank charges and/or bank interest charges will not be known to the accounts team until the bank statement arrives. A bank statement often provides the first evidence that a cheque received from a customer and paid in has been dishonoured, that is, refused payment by the bank.

Illustration 19

Comparing a cash book record with a bank statement

Illustration 18 showed Beachspray's bank statement for March 2018. Here is an extract from Beachspray's cash book for the same month showing the bank columns.

BOOKS OF BEACHSPRAY

Dr **CASH BOOK (bank columns only)** **Cr**

			$				$
March	1	Balance	800	March	3	Insurance (chq 303472)	360
	16	Sales	890		11	Drawings (chq 303473)	250
	27	Sales	750		19	P Joseph (chq 303474)	440
					27	Water charges (chq 303475)	220
					31	Balance c/d	1170
			2440				2440
April	1	Balance b/d	1170				

Here is a reminder of the bank statement for this month.

Anybank plc
Bank statement for Beachspray

Date		Details	Dr	Cr	Balance	
			$	$	$	
March	1	Balance			800	Cr
	5	303472 General Assurance plc	360		440	Cr
	5	DD Regional Telecoms plc	230		210	Cr
	14	303473	250		40	Dr
	18	Sundries		890	850	Cr
	21	SO Landward Properties plc	280		570	Cr
	24	Credit transfer – Michael Lee		480	1050	Cr
	27	CHR	80		970	Cr

Just a glance at this cash book shows that there are differences with the bank statement. The most obvious point is that the closing balances shown in the two documents are different: the cash book balance is $1 170, but the bank statement shows a balance of $970 (both positive).

It is important to find all the possible reasons for a difference in a systematic way, particularly as, in reality, a business's cash book and the matching bank statement may be many pages long.

The technique to use is to match every single item which appears in both documents and place a tick (✓) beside the entry in each document. Always start by checking that the opening balances agree and then work systematically through the documents.

Here are the two statements showing ticked entries.

BOOKS OF BEACHSPRAY

Dr **CASH BOOK (bank columns only)** **Cr**

			$				$
March	1	Balance	✓800	March	3	Insurance (chq 303472)	✓360
	16	Sales	✓890		11	Drawings (chq 303473)	✓250
	27	Sales	750		19	P Joseph (chq 303474)	440
					27	Water charges (chq 303475)	220
					31	Balance c/d	1170
			2440				2440
April	1	Balance b/d	1170				

Anybank plc
Bank statement for Beachspray

Date		Details	Dr	Cr	Balance	
			$	$	$	
March	1	Balance			✓800	Cr
	5	303472 General Assurance plc	✓360		440	Cr
	5	DD Regional Telecoms plc	230		210	Cr
	14	303473	✓250		40	Dr
	18	Sundries		✓890	850	Cr
	21	SO Landward Properties plc	280		570	Cr
	24	Credit transfer – Michael Lee		480	1050	Cr
	27	CHR	80		970	Cr

Items that are not ticked will have caused the two closing balances to be different. The unticked items will have arisen for the reasons described above. Here is a summary of the unticked items.

Timing differences

- unpresented cheques (cheques not shown on the bank statement): P Joseph, $440; water charges, $220
- late lodgment (amounts paid in not shown on bank statement): $750.

Oversights by, or information not available to, Beachspray staff

- direct debit for $230; standing order for $280; credit transfer for $480; bank charges, $80.

Practice questions

23. Comparing the cash book with a bank statement

Referring to Question 21, here is the cash book (bank columns only) record for Jody's Jewellery Store as maintained by Jody's accounts team for May 2018.

BOOKS OF JODY'S JEWELLERY STORE							
Dr	CASH BOOK (bank columns only)						Cr
			$				$
May	1	Balance	1400	May	2	General expenses (chq 27204)	320
	13	Sales	1780		9	Latoya Fray (chq 27205)	820
	28	Sales	1240		23	Supagems (chq 27206)	740
					24	Rent (SO) (chq 27207)	480
					31	Balance c/d	2060
			4420				4420
June	1	Balance b/d	2060				

Compare this cash book with the bank statement prepared in answer to Question 21. Place ticks alongside entries that appear in both documents (include a check on whether the opening balances matched). Identify and list any items that are not ticked.

24. Comparing the cash book with a bank statement

Referring to Question 22, here is the cash book (bank columns only) record for Pitts Fishing Supplies as maintained by Irvin's accounts team for July 2018.

BOOKS OF PITTS FISHING SUPPLIES							
Dr	CASH BOOK (bank columns only)						Cr
			$				$
July	1	Balance	930	July	3	TMT Ltd (chq 787891)	640
	13	Sales	1370		8	Drawings (chq 787892)	310
	29	Sales	990		20	Stationery (chq 787893)	100
					29	Salary (chq 787894)	1700
					31	Balance c/d	540
			3290				3290
Aug	1	Balance b/d	540				

Compare this cash book with the bank statement prepared in answer to Question 22. Place ticks alongside entries that appear in both documents (include a check on whether the opening balances matched). Identify and list any items that are not ticked.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Updating the cash book

The next step is to correct those oversights in the cash book that have become apparent from looking at the bank statement and to use any information on the bank statement that was not previously available. Extra entries are made in the cash book and a new, more up-to-date balance extracted.

Illustration 20

Updating the cash book

Referring again to the affairs of Beachspray, it is now possible to update the business's cash book. To do this, it is important to use the list of oversights by, or information previously not available to, Beachspray staff. These were identified in Illustration 18. The cash book would be updated as soon as the comparison with the bank statement has been made. It is assumed the comparison was made on 1 April 2018.

Here is an updated version of the cash book.

BOOKS OF BEACHSPRAY							
Dr	CASH BOOK (bank columns only)						Cr
			$				$
March	1	Balance	800	March	3	Insurance (chq 303472)	360
	16	Sales	890		11	Drawings (chq 303473)	250
	27	Sales	750		19	P Joseph (chq 303474)	440
					27	Water charges (chq 303475)	220
					31	Balance c/d	1170
			2440				2440

April	1	Balance b/d	1170	April	1	Telephone charges (DD)	230
	1	Michael Lee	480		1	Rent (SO)	280
					1	Bank charges	80
					1	Balance c/d	1060
			1650				1650
April	1	Balance b/d	1060				

At the same time, the double-entry records would be made in the business's accounts in the usual way.

At this stage, Beachspray's cash book is as up to date as it could be.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Practice questions

25. Updating a cash book

Using the information in Questions 21 and 23, update the cash book balance of $2 060 for Jody's Jewellery Store.

26. Updating a cash book

Using the information in Questions 22 and 24, update the cash book balance of $540 for Pitts Fishing Supplies.

Completing the process: the bank reconciliation statement

Key term

Bank reconciliation statement: a document prepared by businesses at regular intervals (say monthly) to check that their bank records agree with those provided by the bank.

Having updated the cash book, it is now just the bank statement which is not up to date because of those timing differences. Naturally, it is not possible to get access to the bank's records to do the updating and, in any case, these matters will sort themselves out in the course of time. Instead, the business's accounts team will prepare what is called a **bank reconciliation statement**. This statement makes use of the list of timing differences discovered when comparing the cash book and the bank statement. Its purpose is to make sure that the bank statement balance would agree with the updated cash book balance. If it does, then all is well! If it does not, then somewhere there is an error – or errors! (The errors could be in the business's accounting records, but could, of course, be in the bank's record keeping. Banks do sometimes make mistakes.)

Illustration 21

Preparing a bank reconciliation statement

Referring again to the affairs of Beachspray, it is possible to prepare a bank reconciliation statement using the updated cash book balance (see Illustration 19) of $1 060 and the list of timing differences (see Illustration 18).

There are two possible approaches to producing the bank reconciliation statement, one starting with the bank balance and the other with the cash book balance. Here is one version of the statement.

Beachspray
Bank reconciliation statement at 1 April 2018

	$	$
Balance as per **bank statement**		970
Less unpresented cheques: P Joseph (303474)	440	
Water charges (303475)	220	
		660
		310
Add late lodgment		750
Balance as per **cash book**		1060

Notes:

- When the timing differences are taken into account, the reconciliation statement shows that the bank statement balance and the updated cash book balance would agree. So all appears to be well.
- In this version, which starts with the bank statement balance, the thinking process is:
  - unpresented cheques: when these are included in the bank statement, the balance will decrease – hence they are deducted.
  - late lodgment: when this item is included on the bank statement, the balance will increase – hence the amount is added.
- It is useful to list all the unpresented cheques with their numbers (as shown above) because this will make them easier to trace when the next bank statement arrives.

Alternatively, some accounts staff prefer this approach.

Beachspray
Bank reconciliation statement at 1 April 2018

	$	$
Balance as per **cash book**		1060
Add unpresented cheques: P Joseph (303474)	440	
Water charges (303475)	220	
		660
		1720
Less late lodgment		750
Balance as per **bank statement**		970

Tip

The word "reconcile" – as used in bank reconciliation statement – means to make two apparently conflicting things (in this case, the cash book balance and the bank statement balance) consistent with each other.

Notes:

- In this alternative approach, the reconciliation statement starts with the updated cash book balance.
- The thinking process is now as follows:
  - unpresented cheques: if these had not been issued, the cash book balance would have been higher – so the unpresented cheques are added back
  - late lodgment: if this was removed from the cash book the balance would be lower – so the item is deducted.

Tip

When answering a question on bank reconciliation, it is important to separate out the oversights, and lack of information, that have affected the cash book from the timing differences that have affected the bank statement. Remember that the first list of information (oversights and lack of information) is required when updating the cash book balance. The list of timing differences is required when preparing the bank reconciliation statement. If the two groups are not correctly separated, it is easy to get into a muddle when preparing an answer.

Practice questions

27. Preparing a bank reconciliation statement

Using all the information available for Jody's Jewellery Store in Questions 21, 23 and 25, prepare a bank reconciliation statement dated 1 June 2018.

28. Preparing a bank reconciliation statement

Using all the information available for Pitts Fishing Supplies in Questions 22, 24 and 26, prepare a bank reconciliation statement dated 1 August 2018.

29. The complete process

On 1 November 2018, the following bank statement covering October was received by the head of the accounts team at Elias Wholesale Flowers.

Midbay Bank plc
Bank statement for Elias Wholesale Fruit

Date		Details	Dr	Cr	Balance	
			$	$	$	
Oct	1	Balance			4 310	Cr
	3	447802 JKJ Imports	2 730		1 580	Cr
	11	Sundry credit		1 640	3 220	Cr
	13	CHR	240		2 980	Cr
	18	447804	630		2 350	Cr
	21	DD Regional Telecoms plc	550		1 800	Cr
	23	Sundry credit		1 890	3 690	Cr
	25	Credit transfer: M Deosaran		490	4 180	Cr
	26	447805 Gobin Traders	1 480		2 700	Cr
	27	SO Transcity Properties	820		1 880	Cr
	28	Dishonoured cheque: YJ Traders	450		1 430	Cr

The business's cash book (bank columns) for the same period was as follows.

BOOKS OF ELIAS WHOLESALE FRUIT							
Dr		CASH BOOK (bank columns only)					Cr
			$				$
Oct	1	Balance	4310	Oct	1	JKJ Imports (chq 447802)	2730
	7	Sales	1640		3	Electricity (chq 447803)	490
	20	Sales	1150		12	Admin expenses (chq 447804)	630
	20	M Lall	740		23	Gobin Traders (chq 447805)	1480
	28	Sales	1370		26	L Thomas (chq 447806)	810
					27	Rent (standing order)	820
					31	Balance c/d	2250
			9210				9210
Nov	1	Balance b/d	2250				

a. Compare the two records.

b. Tick all the items that appear in both documents.

c. Update the cash book balance at 1 November 2018.

d. Prepare a bank reconciliation statement dated 1 November 2018.

30. The complete process

On 1 June 2018, the following bank statement covering May was received by the accounts department of the business called Elite Publishing.

Westown Bank plc Bank statement for Elite Publishing						
Date		Details	Dr	Cr	Balance	
			$	$	$	
May	1	Balance			7328	Cr
	5	Sundry credit		3395	10723	Cr
	6	110744 MLD Books	2242		8481	Cr
	8	110747 Abbey Stationery Ltd	1631		6850	Cr
	14	Credit transfer: investment interest		480	7330	Cr
	17	DD Hydro water	722		6608	Cr
	19	110746 Circle Wholesales	1039		5569	Cr
	20	Sundry credit		4437	10006	Cr
	22	CHR	330		9676	Cr
	29	SO Publishers Society membership	350		9326	Cr
	30	Dishonoured cheque: Princeford Books	860		8466	Cr

The business's cash book (bank columns) for the same period was as follows.

BOOKS OF ELITE PUBLISHING

Dr — CASH BOOK (bank columns only) — Cr

			$				$
May	1	Balance	7328	May	2	MLD Books (chq 110744)	2 242
	2	Sales	2595		3	Palmleaf Stores (chq 110745)	1 833
	2	Dass Books Ltd	800		3	Circle Wholesales (chq 110746)	1 039
	18	Sales	4437		5	Abbey Stationery Ltd (chq 110747)	1 631
	27	Sales	3375		18	General expenses (chq 110748)	538
					31	Balance c/d	11 252
			18535				18 535
June	1	Balance b/d	11252				

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

a. Compare the two records.
b. Tick all items which appear in both documents.
c. Update the cash book balance at 1 June 2018.
d. Prepare a bank reconciliation statement dated 1 June 2018.

What about overdrawn balances?

Sometimes the reconciliation process will take place when the cash book balance or the bank statement balance (or both) are overdrawn. Where this happens, follow the same processes as described above, but remember that an overdrawn figure should be recorded as a negative, with a reverse consequence for any arithmetical process.

Benefits of the reconciliation process

The bank reconciliation processes described in this unit are one of the most commonly encountered tasks in accounts offices, so obviously businesses find this technique very valuable. The main benefits are that:

- the process checks that the cash book and bank statement are in line with each other, and so any errors (in either document) will be brought to light
- the process enables a business's accounts team to make sure that the cash book is fully updated at regular intervals by including transactions undertaken automatically by the bank
- because there are frequent checks on this important business financial record, it helps reduce the risk of fraud taking place.

Practice questions

31. The bank reconciliation process when there is an overdrawn bank balance

Sherry Henry, the owner of Shire Carpets, has made the following records available for her business.

Citychoice Bank plc
Bank statement for Shire Carpets

Date		Details	Dr	Cr	Balance	
			$	$	$	
April	1	Balance			4500	Dr
	5	800602 Mungroo Wholesale Ltd	2300		6800	Dr
	8	Sundry credit		4700	2100	Dr
	14	DD Eastern Electricity Ltd	800		2900	Dr
	18	800605 Taylor Textiles	1400		4300	Dr
	28	CHR	500		4800	Dr

BOOKS OF SHIRE CARPETS

CASH BOOK (bank columns only)

Dr				$				$
April	3	Sales		4700	April	1	Balance	4500
	28	Sales		4200		2	Mungroo Wholesale Ltd (chq 800602)	2300
	30	Balance c/d		400		7	Drawings (chq 800603)	400
						12	Rent (chq 800604)	700
						13	Taylor Textiles (chq 800605)	1400
				9300				9300
					May	1	Balance b/d	400

a. Update the cash book balance at 1 May 2018.
b. Prepare a bank reconciliation statement dated 1 May 2018.

32. The bank reconciliation process when there is an overdrawn bank balance

The bank statement and cash book (bank columns) for June 2018 have been made available by John Steven, the owner of Best Furnishings.

Secure Bank plc
Bank statement for Best Furnishings

Date		Details	Dr	Cr	Balance	
			$	$	$	
June	1	Balance			4233	Dr
	6	Credit transfer: Homeware Retail		1220	3013	Dr
	9	374112 Lakeford Ltd	1885		4898	Dr
	11	DD Regional Power Supplies plc	478		5376	Dr
	16	CHR	612		5988	Dr
	17	374116	675		6663	Dr
	21	Sundry credit		2083	4580	Dr
	26	374113	417		4997	Dr
	28	SO Best Properties plc	840		5837	Dr

BOOKS OF BEST FURNISHINGS

CASH BOOK (bank columns only)

Dr				$				$
June	17	Sales		2083	June	1	Balance	4233
	29	Sales		4114		3	Lakeford Ltd (chq 374112)	1885
	30	Balance c/d		3183		8	General expenses (chq 374113)	417
						9	Water charges (chq 374114)	630
						12	Castle Furnishings plc (chq 374115)	592
						13	Drawings (chq 374116)	675
						24	Lakeford Ltd (chq 374117)	948
				9380				9380
					July	1	Balance b/d	3183

a. Update the cash book balance at 1 July 2018.
b. Prepare a bank reconciliation statement dated 1 July 2018.
c. Explain why John Steven's business benefits from the monthly preparation of bank reconciliation statements.

33. Working from a list of items – bank statement balance not stated

On 31 July 2018, Sophia Thomas received a bank statement for her business that showed a closing balance that differed from that recorded in her cash book. On this date, the cash book balance was overdrawn $885.

The following discrepancies between the two records were found:

- Bank charges of $596 had been omitted from the cash book.
- A cheque sent to a supplier, H Khan, for $947 did not appear on the bank statement.
- The bank statement showed a credit transfer of $1 040 from a customer, Excel Products Ltd, that had not been recorded in the cash book.
- The bank had yet to record cash sales of $2 108 paid in on 29 July 2018.
- A standing order payment of $481 for insurance premiums had not yet been recorded in the cash book.

a. Update Sophia Thomas's cash book balance on 31 July 2018.

b. Prepare a bank reconciliation statement dated 31 July 2018 that shows the original balance shown on the bank statement received on this date.

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. What is the purpose of a trial balance?
   - **A** To check the arithmetical accuracy of the bookkeeping
   - **B** To calculate the amount of profit or loss
   - **C** To check that all the transactions have been included in the books of account
   - **D** To check that there are no bookkeeping errors

2. Lewis Dass posts $750 to the debit of A Brown's account instead of to the debit of A Brownson's account. What is this mistake known as?
   - **A** An error of principle
   - **B** An error of commission
   - **C** An error of omission
   - **D** A compensating error

3. Ravi Khan enters the purchase of a delivery van as a debit in the purchase account. What kind of error is this?
   - **A** Omission
   - **B** Original entry
   - **C** Compensation
   - **D** Principle

4. A private car repair bill has been included as a business expense in the books of account. What is the journal entry required to correct this error?
   - **A** Debit motor vehicles account
Credit capital account
   - **B** Debit capital account
Credit motor vehicles account
   - **C** Debit vehicle running expenses account
Credit motor vehicles account
   - **D** Debit drawings account
Credit vehicle running expenses account

5. A trial balance had the following totals: Dr $10 000; Cr $10 200.

   Which of the following errors, subsequently discovered, could have caused this disagreement?
   - **A** A computer printer, cost $200, purchased for office use had been debited to the purchases account.
   - **B** The sales book had been overcast by $200.
   - **C** Electricity charges paid, $200, had been debited to the telephone expenses account.
   - **D** The return of goods, $200, to a supplier had been completely omitted from the books.

6. When a business's trial balance was prepared, the totals of the columns were: Dr $18 300, Cr $17 400. Two of the errors discovered were that discounts allowed, $200, had been credited to the discounts received account, and that the sales returns book had been overcast by $100.

   When these errors are corrected the totals of the trial balance will be:

A	Debit $18 400	Credit $17 200
B	Debit $18 600	Credit $17 200
C	Debit $18 000	Credit $17 600
D	Debit $18 200	Credit $17 600

7. A business's trial balance did not agree and the difference was entered in a suspense account. On checking the books of account, it was found that the discounts allowed column in the cash book, totalling $40, had been posted to the credit side of the discounts received account.

   What amount should be entered in the suspense account when this error is corrected?

A $80 credit
B $40 debit
C $40 credit
D $80 debit

8. Which one of the following should be entered in an accounts receivable control account?
A Cash sales
B Discounts allowed
C Purchase returns
D Discounts received

9. An accounts receivable control account contained the following items at the end of the month:

	$
Debit balance at beginning of the month	8 000
Credit sales for the month	12 500
Sales returns for the month	700
Cash received from receivables	9 600
Interest charged on overdue accounts for the month	150

What was the total amount owed by receivables at the end of the month?
A $10 050
B $10 350
C $11 450
D $11 750

10. Which one of the following should be entered in an accounts payable control account?
A Sales returns
B Discounts received
C Refunds to receivables
D Cash purchases

11. What does the final balance on a correctly prepared purchases ledger control account represent?
A Value of unsold purchases
B Total payables of the business
C Profit on goods purchased and sold
D Total of cash purchases

12. The balance of a sales ledger account has been set off against the balance of a purchases ledger account. What is the effect of this contra entry on the balances of the personal accounts?

	Purchases ledger account	*Sales ledger account*
A	Decrease	Decrease
B	Decrease	Increase
C	Increase	Decrease
D	Increase	Increase

13. A bank reconciliation statement is prepared in order to:
A enable the bank to compare the business's receipts with the business's payments
B enable the business's cashier to calculate the liquid capital
C allow the business's cashier to compare the business's cash book balance with the actual bank balance
D allow the business's cashier to reconcile the petty cash balance with the bank balance.

14. A retailer had a cash book debit balance of $450 at bank on 31 December 2018. The retailer received a bank statement on this date and he noted that:
- the bank had not entered on the statement some cheques, total $80, which had been paid in on 30 December 2018
- cheques drawn by him in December 2018, total $60, had not been presented for payment at the bank.

The retailer's bank statement showed an amount due to him of:

A $310
B $430
C $470
D $590

15. Kersha, a retailer, was preparing a bank reconciliation statement and she produced the following information:
- bank balance in the cash book, $6 000 (debit)
- cheques not yet presented, $1 500
- cheques paid in but not yet recorded by the bank, $900

What is the balance shown on the bank statement?

A $3 600
B $5 600
C $6 600
D $8 400

16. The bank columns of a retailer's cash book showed a balance of $2 000 (credit). When the bank statement for the period was received, the following additional entries were made in the bank columns:
- bank charges $600
- interest received $400.

What was the balance of the bank column after updating the cash book?

A $1 000 credit
B $1 800 credit
C $2 200 credit
D $3 000 credit

PAPER 2

Further questions on control systems

17. Correcting errors not revealed by a trial balance

Keith is the chief accounts clerk in a business owned by Shantal Watson. Keith discovered the following errors when the double-entry records were checked on 31 August 2018:
- A payment of $640 to L Spencer had been correctly recorded in the cash book but had been posted to the debit of Spencer Ltd in the purchases ledger.
- A credit note issued to a receivable, Dillon Cousins, for $310, had been entirely overlooked.
- Some new office equipment, $850, had been debited to the purchases account by mistake.
- A cheque paid to Aspen Products for $458 had been entered in the cash book and sales ledger as $548.
- The sales book had been mis-totalled at $8 400 instead of $8 300. At the same time, a purchase of goods for resale, $6 100, had been correctly entered in the purchases book but had been posted to the account of the supplier as $6 000.
- A payment for operating expenses by cheque, $750, had been debited in the cash book and credited to the operating expenses account.

Prepare journal entries to correct these errors. Narratives are required.

18. Correcting errors not revealed by a trial balance

Prepare journal entries with narratives to correct the following errors found in a business's books of account on 30 September 2018:
- A credit note was received from a supplier, D Elias, for $221, but this was entered in the books as $112.

- The total of the discounts received column in the cash book of $180 had not been posted to the ledger; the purchase of a new laptop costing $750 had been entered in the equipment account as $570.
- A sale on credit to L White, $1 480, had been debited to T Wright's account in error.
- Entries for the refund of $120 by cheque to a customer, Laurelle Wray, had been overlooked. The customer had overpaid her account.
- The payment by cheque of carriage inwards of $830 had been debited in the bank account and credited to the carriage inwards account.

19. Correcting a variety of errors, some of which include the use of a suspense account

On taking out a trial balance, it was discovered that there was a difference of $147, which was credited to a suspense account. Subsequently, the following errors were found in the books of account:

- Goods, value $14, sold to L Finch had been posted to the debit of S Finch's account.
- Cash discount of $3 had been allowed to P Garcia and had been credited to her account, but no entry had been made in the discounts allowed account.
- Machinery purchased for $3 000 had been debited to the purchases account.
- A cheque for $470 received from a customer, P Taylor, had been returned by the bank as P Taylor had insufficient funds to make this payment. The entries in the accounts for the returned cheque were: Dr Bank, Cr P Taylor, $470.
- The total of the sales journal had been undercast by $100.
- The withdrawal of cash by the owner, $80, was omitted from the accounts.
- An opening balance of $50 on a payable's account had not been recorded in the payable's account.

a. Make journal entries to correct these errors.

b. Prepare the suspense account.

20. Correcting a variety of errors, some of which include the use of a suspense account

The totals of a trial balance did not agree. They were: Dr $17 460, Cr $17 290.

The following errors were discovered:

- The discounts received total in the cash book of $25 had not been posted to the discounts received account.
- A purchase returns to M Williams of $17 had not been posted from the book to the account of M Williams in the purchases ledger.
- An invoice for $18 600 for a vehicle for delivering goods to customers had been misread and the entries in the journal were for $16 800.
- The total of the discounts allowed column in the cash book had been overcast by $4.
- The account of receivable, UTV Ltd, had been written off when the balance due was $380. The entries made were: Dr UTV Ltd, Cr Bad debts account.
- Cash drawings of $14 had been correctly entered in the cash book but had been entered in the drawings account as $19.
- Cash sales account, $5 523, had been correctly entered in the cash book, but had been posted to the sales account as $5 370.

a. Make entries to correct these errors in the journal (including narratives).

b. Prepare the suspense account to show relevant entries arising from the difference in the trial balance and the correction of errors.

21. Preparing control accounts

Anthony is responsible for preparing purchases ledger and accounts receivable control accounts at the end of each month. On 30 April 2018, Anthony had extracted the following information from the business's accounting records:

	$
Balances at 1 April 2018:	
sales ledger debit balance	14 790
sales ledger credit balance	330
purchases ledger debit balance	640
purchases ledger credit balance	22 470
Sales:	
credit sales	51 830
cash sales	22 450
Purchases:	
credit purchases	48 410
cash purchases	8 350
Sales returns (from returns inwards book)	1 240
Payments to accounts payable	46 330
Receipts from accounts receivable	53 510
Purchases returns (from returns outwards book)	930
Discounts allowed	440
Discounts received	760
Balances at 30 April 2018:	
sales ledger debit balance	?
sales ledger credit balance	480
purchases ledger debit balance	210
purchases ledger credit balance	?

Prepare an accounts payable control account and accounts receivable control account for April 2018. Select the relevant information from the information provided.

22. Preparing control accounts

Cynthia has extracted the following details from her business's books of account on 31 January 2018.

	$
Balances at 1 January 2018:	
sales ledger debit balance	33 640
sales ledger credit balance	730
purchases ledger debit balance	440
purchases ledger credit balance	29 780
Sales book total for January 2018	95 460
Purchases book total for January 2018	73 550
Returns inwards book total for January 2018	3 110
Returns outwards book total for January 2018	4 830
General journal totals for January 2018:	
Bad debts	970
Interest charged on customer's overdue accounts	80
Interest charged by suppliers on overdue accounts	140
Contra entries between the purchases ledger and the sales ledger $330	
Cash book totals for January 2018:	
Receipts from accounts receivable	85 370
Payments to accounts payable	64 390
Cash sales	48 470
Cash purchases	3 260
Refunds to accounts receivable who had overpaid their accounts	280
Dishonoured cheques received from accounts receivable	730
Discounts allowed	1 140
Discounts received	2 080
Balances at 31 January 2018:	
Sales ledger debit balance	?
Sales ledger credit balance	490
Purchases ledger debit balance	820
Purchases ledger credit balance	?

Prepare an accounts payable control account and accounts receivable control account for January 2018. Select the relevant information from the information provided.

23. Preparing a bank reconciliation statement from a bank statement and cash book extract

Shantal is responsible for preparing bank reconciliation statements for her employer, Ace Jewellers Ltd.

On 16 May 2018, Shantal received the following bank statement.

Bank statement for Ace Jewellers Ltd, dated 16 May 2018

Date		Details	Dr	Cr	Balance	
			$	$	$	
5	May	Balance brought forward			5460	Cr
5	May	Cheque 272103	660		4800	Cr
7	May	Credit		2060	6860	Cr
8	May	DD water charges	580		6280	Cr
11	May	Credit		980	7260	Cr
13	May	Cheque 272102	160		7100	Cr
13	May	Cheque 272106	1080		6020	Cr
14	May	SO rent	1700		4320	Cr
15	May	Credit transfer: BML Ltd		540	4860	Cr
16	May	Cheque 272101	960		3900	Cr
16	May	Bank charges	80		3820	Cr

On this date, the relevant extract from the business's cash book was as follows.

Dr		CASH BOOK (extract)				Cr
			$			$
May	5	Balance	5460	May 7	272101 T Chadee	960
May	5	K Pulchan	2060	May 8	272102 L Chin	160
May	7	L Samaroo	980	May 9	272103 M Patel	660
May	16	J Deosaran	2560	May 11	272104 Electricity	940
				May 11	272105 B Ram-kisson	300
				May 11	272106 Drawings	1080

Reconcile the cash book and bank statement at 16 May 2018 by:

a. updating the cash book
b. preparing a bank reconciliation statement.

24. Preparing bank reconciliation statement from a cash book extract and a bank statement

Walter Bennett is the owner of Pearlriver Stores.

Walter received the following bank statement on 5 September 2018.

Bank statement for Pearlriver Stores, dated 31 August 2018

Date		Details	Dr	Cr	Balance	
			$	$	$	
Aug	1	Balance brought forward			440	OD
	7	Cheque 372708	400		840	OD
	8	Cheque 372707	2964		3804	OD
	13	Cheque 372709	260		4064	OD
	14	Sundry credit		690	3374	OD
	15	DD electricity	1454		4828	OD
	16	Sundry credit		5440	612	
	19	Credit transfer: Scott-Lee Ltd		1120	1732	
	18	SO rent	2960		1228	OD
	21	Cheque 372711	638		1866	OD
	30	Sundry credit		544	1322	OD
	31	Charges	240		1562	OD

The entries in the business's cash book for August 2018 were as follows.

Dr		CASH BOOK (bank columns)		Cr	
		$			$
Aug 11	Sales	5 440	Aug 1	Balance b/f	440
12	W Spencer	690	Aug 2	K Fray (chq 372707)	2 964
26	Sales	2 858	4	Drawings (chq 372708)	400
27	L Wray	544	9	Purchases (chq 372709)	260
			14	Perrier & Co. (chq 372710)	3 630
			19	Vehicle repairs (chq 372711)	638
			26	Insurance (chq 372712)	1 052

Reconcile the cash book and bank statement at 5 September 2018 by:

a. updating the cash book

b. preparing a bank reconciliation statement.

25. Preparing bank reconciliation statements

Utilda prepares bank reconciliation statements on a monthly basis for her employer.

On 31 October 2018, the cash book showed a balance at bank of $14 370. However, this figure did not agree with the bank statement balance at this date. Utilda has identified the following possible causes of this difference:

- A direct debit for water charges of $320 was shown on the bank statement but omitted from the cash book.
- Cheques received from accounts receivable at the end of the month had been included in the cash book, but had not yet been credited by the bank: TBS Ltd, $1 040; K McEwan, $460.
- Bank charges of $190 were shown in the bank statement, but had not yet been recorded in the cash book.
- A credit transfer of $330 from a receivable, VTN Products, appeared in the bank statement but not in the cash book.
- The cash book included cheques paid to accounts payable: V Chadee, $740; L Nanan, $1 130. These cheques had not yet been presented for payment.

a. Prepare an extract from the business's cash book showing an updated balance at 31 October 2018.

b. Prepare a bank reconciliation statement that shows the balance as per the bank statement at 31 October 2018.

26. Preparing bank reconciliation statements

Zamran's cash book showed a credit balance of $16 584 at 31 May 2018. However, the balance shown on the bank statement at that date did not agree with the balance shown in the cash book.

The following possible causes of this difference were found:

- A standing order of $484 on 27 May 2018 had been overlooked when preparing the cash book.
- On 31 May 2018, the bank had refunded some interest, $112, which had been incorrectly charged to Zamran's current account one month earlier. This refund has not yet been recorded in the cash book.

- A cheque in payment of an account payable, Supafuels Ltd, $3 000, had been entered in the cash book but has not yet been presented for payment.
- Bank charges of $90 for May 2018 appear on the bank statement, but have yet to be recorded in the cash book.
- A cheque received from an account receivable on 4 May 2018 for $673, appears in the bank statement but has been recorded in the cash book as $763.

a. Prepare an extract from Zamran's cash book showing an updated balance at 31 May 2018.

b. Prepare a bank reconciliation statement which shows the balance as per the bank statement at 31 October 2018.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260.

8 Accounting for partnerships

Setting the scene

You are now familiar with preparing the accounting records of a sole trader. This chapter will introduce you to the accounting records of partnerships. The partnership form of ownership can be found in many different types of business organization. They are perhaps most commonly to be found in the professions, such as legal, accountancy, medical and real estate.

The main emphasis in accounting for partnerships is on:

- maintaining the records relating to each partner: capital invested, drawings, shares of profits
- applying agreements between partners on how profits and losses should be shared.

Syllabus coverage

	Syllabus	Unit
1	Define a partnership business	8.1
2	State the features of a partnership	
3	Give reasons for establishing a partnership	
4	Outline the essential components of a partnership agreement	8.1
5	Prepare journal entries and ledger accounts to record the capital of a partnership	
6	Use various methods to share profit/loss among partners	
7	Prepare appropriation accounts of partnerships	8.1
8	Prepare current accounts of partners	
9	Explain the significance of the brought down balances on partners' current accounts	
10	Prepare statements of financial position (balance sheets) for partnerships	8.2

8.1 An introduction to partnerships accounts

Objectives

By the end of this unit you will be able to:

- explain the benefits and potential drawbacks of partnerships
- prepare journal entries and ledger accounts to record partners' capital
- prepare appropriation accounts to show how profits or losses are shared among partners
- prepare partners' current accounts to record drawings and shares of profits or losses.

What is a partnership

What is a partnership?

A **partnership** is a form of business ownership in which there are at least two owners (partners) who share the profits or losses made by the business.

In most cases, the limit on the number of partners is 20.

Why form a partnership?

A partnership enjoys several benefits that do not apply to a sole trader:

- There is the opportunity to raise more capital than would normally be possible if there was just one owner.
- The specialist skills and expertise of each partner can be brought together for the benefit of the business.
- With more than one owner, it may be easier to manage the business because the workload can be shared.

However, there are also some disadvantages:

- In almost every case, each partner will have unlimited liability for the debts of the business. This is exactly the same disadvantage that is experienced by a sole trader. (There is one exception: limited partnerships, discussed below.)
- Decision-making can be more difficult, or take longer, because all the partners will be required to agree on key aspects of running the business. Sometimes a good idea will not be implemented because one of the partners does not support it.
- Each partner is bound by the agreements made by all the partners.
- All the partners are jointly responsible for the debts of partnership, even if an individual partner played no direct part in incurring the debt. This is one example of **mutual agency** whereby each partner has the power to make contracts on behalf of the partnership and each partner is bound by the actions of the other partners in the normal running of the partnership.
- A partnership business may be somewhat short lived, because it may have to close on the retirement or death of one of the partners.

Key term

Partnership: a form of business ownership when two or more individuals work together with the intention of making a profit.

Tip

The more formal definition of a partnership is "the relationship between persons carrying on a business in common with the intention of making a profit". This is the idea of a voluntary association where a group of individuals join together on the basis of common objectives.

Key term

Mutual agency: a legal relationship between partners in a partnership where each partner has authorization powers and the ability to enter the partnership into business contracts.

Key terms

Limited partnership: where one or more of the partners has limited liability for the debts of the business.

Profit and loss sharing ratio: the ratio that is used to share any residual profit (or loss) of a partnership.

Deed of partnership: the formal agreement between partners that states how profit and losses will be shared and the rules under which the partners will work together.

- There has to be a high level of mutual trust between the partners. So, for a partnership to be successful good relationships have to be maintained. This may not always be easy to do with the everyday stresses and strains of running a business.

What is a limited partnership?

It is possible to establish a partnership business where one or more of the partners enjoy "limited liability" for the debts of the business; this is referred to as a **limited partnership**. This means that a limited partner could only lose their capital contribution to the business in the event of the business failing. There are, however, certain conditions which must be fulfilled:

- A limited partner cannot take part in the day-to-day running or management of the business.
- A limited partner cannot withdraw any part of his or her capital contribution while the business is a going concern.
- There must be a least one partner who is not a limited partner, often referred to as a "general partner".
- The business has to be formally registered as a limited partnership; otherwise it would be considered to be a "general partnership" in the eyes of the law.

How do partners share profits and losses?

Normally partners make an agreement about how they intend to share the profits (or losses) made by the business and other key matters that could affect their relationship with each other. It is usually considered wise for partners to have a formal written agreement. However, this is not essential – the partners could just agree orally how they intend to share profits or losses.

Partners can make the profit/loss-sharing arrangement very straightforward by simply agreeing to split profits or losses equally or in some other ratio, the **profit and loss sharing ratio**.

In addition, partners will often agree on:

- the amount of capital to be invested in the business by each partner
- the responsibilities each partner will have in the management and running of the business
- a limit on each partner's drawings.

In many partnerships, partners agree that the capital invested should be fixed, so that an individual partner cannot increase or decrease their capital contribution without the agreement of the other partners.

The formal written document drawn up by partners stating how they will work together and share profits and losses is called a **deed of partnership**.

Illustration 1

Sharing profits

Sonya and Travis have agreed to form a partnership. They have drawn up a deed of partnership which states that:

- Sonya is to contribute $90 000 as her capital
- Travis is to contribute $60 000 as his capital
- Sonya and Travis will jointly manage the day-to-day running of the business
- neither partner is permitted to withdraw more than $25 000 per annum from the partnership for personal use
- profits or losses are to be shared in the ratio Sonya to Travis, 3 : 2.

In the first year of operation, the partnership made a profit of $82 000.

In accordance with their agreement, this profit was shared in the following way:

Sonya: $\frac{3}{5} \times \$82\,000 = \$49\,200$

Travis: $\frac{2}{5} \times \$82\,000 = \$32\,800$

Tip

How to work with ratios

It might be some time since you had to use ratios, so here is a reminder on how to use ratios when working out answers in partnership accounts.

Step 1: Identify the ratio you are to use (for example, 5 : 2 : 1) and the profit/loss you are to divide in the ratio (for example, $64 000).

Step 2: Add up each element in the ratio to give the number of "parts" you are to use: 5 + 2 + 1 = 8 parts

Step 3: Divide the profit (or loss) by the number of parts:

$\frac{\$64\,000}{8} = \$8\,000$ per "part"

Step 4: Return to the ratio and take each element in turn to divide up the profit. So taking 5 parts first, the profit share would be $5 \times \$8\,000 = \$40\,000$.

Step 5: Work through the other elements in the ratio. So taking 2 parts, the second profit share would be $2 \times \$8\,000 = \$16\,000$. Taking 1 part, the third profit share would be $1 \times \$8\,000 = \$8\,000$.

Step 6: It is a good idea to double check that the profits shares add up to the right figure. $40 000 + $16 000 + $8 000 = $64 000 – which is correct.

Practice questions

1. Calculating profit shares

Oliver, Penelope and Rajiv are planning to enter into partnership. They have not yet decided what profit/loss sharing ratio they should adopt. They have considered the following possibilities:

a. equal shares
b. Oliver, Penelope, Rajiv 5 : 3 : 2
c. Oliver, Penelope, Rajiv 4 : 2 : 1.

They expect to make a profit of $63 000 during the first year.

Calculate each partner's share of this profit for each of the profit-sharing arrangements **a**, **b** and **c**.

2. Calculating profit shares

Jamal, Karen and Lewis are planning to enter into partnership. They have not yet decided what profit/loss sharing ratio they should adopt. They have considered the following possibilities:

a. equal shares
b. Jamal, Karen, Lewis 6 : 3 : 1
c. Jamal, Karen, Lewis 2 : 3 : 7.

They expect to make a profit of $84 000 during the first year.

Calculate each partner's share of this profit for each of the profit-sharing arrangements **a**, **b** and **c**.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

However, it is quite common for partners to make more elaborate arrangements to ensure that partners are fairly rewarded for the various ways in which they have contributed to the business. It is also possible to have a penalty based on the amount and timing of a partner's drawings.

Key term

Interest on capital: a reward for each partner in the form of a share of profits that is related to the amount of capital contributed by the partner.

Interest on capital

Each partner may be allocated a share of profits based on the relative size of their capital contributions. This is put into effect by giving each partner what is called **interest on capital** at some agreed rate per annum. As a result, the partner who has made the largest capital contribution will receive a greater reward than the other partners, who have contributed less.

Illustration 2

Interest on capital

Annika and Bobby are in partnership, sharing profits and losses in the ratio 4 : 3. The partners' capital contributions are as follows.

	$
Annika	100 000
Bobby	160 000

The partners have also agreed to allow interest on capital at 10% per annum.

During the year ended 31 December 2018, the partnership made a profit of $75 000.

Following the terms of their agreement, Annika and Bobby will share the profit of $75 000 in the following way.

	Annika	Bobby
	$	$
Profit to be shared = $75 000		
Interest on capital (10% × capital)	10 000	16 000
Residual profit (profit less interest on capital) = $75 000 – $26 000 = $49 000, shared in ratio 4 : 3	28 000	21 000
Total share of profits	38 000	37 000

Practice questions

3. Calculating profit shares when there is interest on capital

Andy and Beverley are in partnership, sharing profits and losses equally. They have agreed that each partner should be entitled to interest on capital at 10% per annum. The partners' capital contributions are:

	$
Andy	65 000
Beverley	72 000

Calculate each partner's share of the profit for the year ended 30 September 2018, when the partnership made a profit of $83 000.

4. Calculating profit shares when there is interest on capital

Robin, Sharla and Trevor are in partnership, sharing profits and losses in the ratio 3 : 2 : 1. The partners have agreed that each partner should be entitled to interest on capital at 8% per annum. The partners' capital contributions are:

	$
Robin	300 000
Sharla	360 000
Trevor	240 000

Calculate each partner's share of the profit for the year ended 31 October 2018, when the partnership made a profit of $198 000.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key terms

Partnership salary: a reward in the form of a share of profits for any partner who has particular responsibilities in the business.

Residual profit or loss: the profit (or loss) of the partnership after all agreed rewards have been allocated to partners.

Partnership salary

A partner who has taken on a special role in the business, and has therefore contributed more to the management and running of the partnership than the others, can be allocated an agreed amount of profit each year called a **partnership salary**.

The partnership salary is a means of allocating some profit to a partner. This is not the same as an employee's salary, which would be charged as an expense in the income statement (trading and profit and loss account).

Illustration 3

Partner's salary

Rakesh and Stacy are in partnership, sharing profits and losses in the ratio 2 : 1. Stacy takes the most responsibility for managing the business. As a result, the partners have agreed that Stacy should receive a partnership salary of $15 000 per annum.

During the year ended 31 October 2018, the partnership made a profit of $84 000.

Following the terms of their agreement, Rakesh and Stacy will share the profit of $84 000 in the following way.

	Rakesh	Stacy
	$	$
Profit to be shared = $84 000		
Salary		15 000
Residual profit (profit less salary) = $84 000 – $15 000 = $69 000	46 000	23 000
Total share of profits	46 000	38 000

Practice questions

5. Calculating profit shares when there is a partnership salary

Faye, George and Henry are in partnership, sharing profits and losses in the ratio 5 : 4 : 1. George is entitled to a partnership salary of $26 000 per annum for managing the business.

Calculate each partner's share of the profit for the year ended 31 August 2018, when the partnership made a profit of $112 000.

6. Calculating profit shares when there is a partnership salary

Cindy, David and Euzhan are in partnership, sharing profits and losses in the ratio 3 : 3 : 2. Euzhan is entitled to a partnership salary of $34 000 per annum for taking responsibility for the day-to-day running of the business.

Calculate each partner's share of the profit for the year ended 31 January 2018, when the partnership made a profit of $274 000.

7. Sharing profits and losses when there is a residual loss

Kris and Leah are in partnership, sharing profits and losses equally. Their partnership agreement also states that:

- partners should receive interest on their capital of 10% per annum
- Leah should receive a partnership salary of $14 000 per annum.

The partners' capital contributions are:

	$
Kris	90 000
Leah	70 000

The partners were disappointed that their profit for the year ended 31 December 2018 was much lower than forecast at $24 000.

Calculate each partner's share of the profit for the year ended 31 December 2018.

8. Sharing profits and losses when there is a residual loss

Yvette and Zara are in partnership, sharing profits and losses in the ratio 2 : 1. Their partnership agreement also states that:

- partners should receive interest on their capital at 8% per annum
- Yvette should receive a partnership salary of $51 000 per annum.

The partners' capital contributions are:

	$
Yvette	420 000
Zara	360 000

The partnership made a very small profit of $54 000 during the year ended 31 October 2018.

Calculate each partner's share of the profit for the year ended 31 December 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key term

Interest on drawings: a penalty whereby a partner is charged interest on drawings. The interest takes account of the amount of the drawings and the timing.

Interest on drawings

As well as rewarding partners for positive aspects of their contributions towards the success of the business, a partnership agreement can penalise partners for actions that could have had an adverse effect on the business's progress. As a result, some agreements contain a clause that charges each partner **interest on drawings** at a specified rate per annum. The charge is based on the time that a partner has deprived the business of cash, so that drawings taken early in the year are penalised more heavily than drawings taken later in the year.

Illustration 4

Interest on drawings

Leon and Mala are in partnership, sharing profits and losses in the ratio 3 : 2. The partnership agreement specifies that interest should be charged on drawings at the rate of 10% per annum.

During the year ended 31 December 2018, each partner's drawings were as follows:

- Leon: $6 000 on 31 March 2018 and again on 30 September 2018
- Mala: $3 000 on 30 April 2018 and $9 000 on 31 October 2018.

During the year ended 31 December 2018, the partnership made a profit of $74 050.

Step 1

Calculate interest on drawings for each partner.

Leon		
Details	**Calculation**	**$**
31 March 2018, drawings of $6 000	$6 000 × 9 months (0.75 year) × 10%	450
30 September 2018, drawings of $6 000	$6 000 × 3 months (0.25 year) × 10%	150
	Total	600

Mala		
Details	Calculation	$
30 April 2018, drawings of $3 000	$3 000 × 8 months ($\frac{2}{3}$ year) × 10%	200
31 October 2018, drawings of $9 000	$9 000 × 2 months ($\frac{1}{6}$ year) × 10%	150
	Total	350

Following the terms of their agreement, Leon and Mala will share the profit of $74 050 in the following way.

	Leon	Mala
	$	$
Profit to be shared = $74 050		
Interest on drawings	(600)	(350)
Residual profit (profit **plus** interest on drawings) = $74 050 + $950 = $75 000	45 000	30 000
Total share of profits	44 400	29 650

Notes:

- Interest on drawings can be complicated to calculate, because the total interest is built up of charges on each of the partner's withdrawals, and there could many individual withdrawals during a year.
- In some questions, you are likely to be told the amount of each partner's interest on drawings, to save you spending a long time making these calculations.
- You will notice that interest on drawings is added to the profit for the year. In the earlier illustrations, all "rewards" for partners reduced the profit available for sharing. It follows that, as interest on drawings is a "penalty" (rather than a reward), the reverse should apply, that is, it is added to profit.

What extra accounting records are required?

In most partnerships, the partners prefer to keep a separate record of their main capital contributions (often called **fixed capital**) and their drawings and shares of profits or losses. In addition, when preparing the final accounts, it is necessary to include a statement setting out how the profits and losses have been allocated.

Key term

Fixed capital: an arrangement whereby each partner's capital contribution remains unchanged unless all partners agree to an alteration.

Key terms

Current account: a record of a partner's drawings and shares of profits or loss.

Appropriation account: a part of the end-of-year financial statements of a partnership recording how the profit or loss for the year is shared between the partners.

Columnar format: a form of presentation which has the benefit of using multiple columns.

Note:

- In some partnerships, slightly different records for the partners are maintained (see Unit 8.2).

The usual arrangement is as follows:

- Capital accounts: recording the main capital contribution of each partner and any additions or withdrawals of capital. Changes to a partner's fixed capital would be an unusual event and would normally have to be agreed by all the partners.
- Drawings accounts: recording each partner's drawings during the year. This account is closed at the year end and the total drawings transferred to the partner's **current account**.
- Current accounts: recording each partner's total drawings for the year and allocations of profits or losses at the year end.
- **Appropriation account**: prepared annually as part of the final accounts. The appropriation account records the profit or loss for the year (transferred from the income statement (trading and profit and loss account)) and sets out the details of how the profit or loss is shared among the partners following the agreed wishes of the partners.

It is usual to prepare partners' capital accounts and current accounts in **columnar format**. It is possible to prepare single accounts for each partner, but this is much more time consuming.

Partners' current accounts may have debit or credit balances:

- A *debit balance* is a negative balance from the partner's point of view. It indicates that the partner is in debt to the partnership. This situation arises where drawings and/or a loss has exceeded any benefits due to the partner.
- A *credit balance* is a positive balance from the partner's point of view. It indicates that the partner has temporarily increased his/her investment in the partnership. This situation arises where a partner's share of profits has exceeded drawings.

Illustration 5

Preparing the partners' accounting records

George, Huanna and Irene entered into partnership on 1 January 2018. The partners' fixed capital contributions are as follows.

	$
George	150 000
Huanna	180 000
Irene	120 000

They have agreed that:

- partners should be charged interest on drawings at 12% per annum
- partners should be entitled to interest on capital at 10% per annum
- Huanna should receive a salary of $16 000 per annum for taking a leading role in managing the business

- remaining profits or losses are to be shared in the ratio George, Huanna, Irene 2 : 2 : 1.

During the year ended 31 December 2018, the partnership made a profit of $94 000. Partners' drawings totalled the following.

	$
George	32 000
Huanna	38 000
Irene	27 000

Interest on drawings has been calculated and amounts to the following.

	$
George	2 400
Huanna	3 800
Irene	800

Step 1: Here are the capital accounts of the partners.

Dr **Capital accounts** **Cr**

	George $	Huanna $	Irene $			George $	Huanna $	Irene $
				Jan 1	Balances	150 000	180 000	120 000

Step 2: During the year, each partner's drawings would be debited to the drawings account. At the year end, the drawings account is closed off and the total drawings for the year transferred to the current accounts.

Here are the drawings accounts of the partners.

Dr **Drawing accounts** **Cr**

		George $	Huanna $	Irene $				George $	Huanna $	Irene $
Jan–Dec	Bank	32 000	38 000	27 000	Dec	31	Current accounts	32 000	38 000	27 000

Step 3: At the end of the year, the sharing of profits and losses between the partners is set out in detail as part of the final accounts. It is important to follow strictly the terms of the partnership agreement.

Here is the appropriation account.

Note:

- You will see that in the example there is just one capital account, but with separate columns for each partner. This form of presenting partners' accounts has the advantage of saving time in making entries. It is recommended that this style of presentation is adopted rather than preparing individual accounts for each partner.

Note:

- The debit entries for drawings shown here are the totals of what are likely to be many individual withdrawals of cash by each partner spread throughout the year.

Note:

- The account should always be correctly titled and the content should always begin with the profit for the year. Take each clause in the partnership agreement in turn and allocate the correct amount of each profit to the partner(s) concerned. It is a good idea to record the interest on drawings first (as an addition), before dealing with the rewards (which are deducted).

George, Huanna and Irene
Appropriation account for the year ended 31 December 2018

	$	$
Profit for the year		94 000
Add interest on drawings:		
George	2 400	
Huanna	3 800	
Irene	800	
		7 000
		101 000
Less interest on capital:		
George (10% × $150 000)	15 000	
Huanna (10% × $180 000)	18 000	
Irene (10% × $120 000)	12 000	
		45 000
		56 000
Less salary, Huanna		16 000
Residual profit		40 000
Shares of residual profit:		
George	16 000	
Huanna	16 000	
Irene	8 000	
		40 000

Step 4: Finally, prepare the current accounts of each partner, showing not only the transfers from the appropriation account, but also each partner's total drawings for the year.

Dr **Current accounts** **Cr**

			George	Huanna	Irene				George	Huanna	Irene
			$	$	$				$	$	$
Dec	31	Drawings	32 000	38 000	27 000	Dec	31	Interest on capital	15 000	18 000	12 000
	31	Interest on drawings	2 400	3 800	800		31	Salary		16 000	
	31	Balance c/d		8 200			31	Residual profits	16 000	16 000	8 000
							31	Balances b/d	3 400		7 800
			34 400	50 000	27 800				34 400	50 000	27 800
Jan	1	Balances b/d	3 400		7 800	Jan	1	Balance b/d		8 200	

Notes:

- Total drawings are transferred from the drawings account at the year end.
- Interest on drawings is transferred from the income statement (trading and profit and loss account) and debited to the current accounts so that each partner is penalised.
- Interest on capital, partners' salaries and residual profit shares are credited to the current accounts so that each is partner is rewarded.
- Huanna has a credit balance on her current account because her drawings have been less than her total share of profits. Huanna is "owed" $8 200 by the partnership.
- George and Irene have debit balances on their current accounts because their drawings have exceeded their profit shares. George and Irene owe $3 400 and $7 800 respectively to the partnership.
- Once a partnership is established, each partner's current account will start with either a debit or credit balance brought forward from the previous year.
- In some businesses, the partners may choose to have separate current accounts for each partner. However, it is recommended that the multi-column style of presentation is adopted.

Practice questions

9. Sharing profits and losses where there is interest on drawings

Keith and Louis are in partnership, sharing profits and losses equally. The partners have agreed that interest should be charged on drawings at 12% per annum.

During the year ended 31 December 2018, the partners' drawings were:

- Keith: withdrew $8 000 on 31 March 2018 and $10 000 on 30 September 2018
- Louis: withdrew $4 000 on 30 April 2018 and $8 000 on 31 August 2018.

The partnership made a profit of $24 280 for the year ended 31 December 2018.

Calculate:

a. the interest on Keith's drawings
b. the interest on Louis's drawings
c. each partner's share of the profits for the year ended 31 December 2018.

10. Sharing profits and losses where there is interest on drawings

Jackie and Keri are in partnership, sharing profits and losses in the ratio 2 : 1. The partners have agreed that interest should be charged on drawings at 6% per annum.

Tip

Don't forget to provide a full and correct title for all final accounting statements – example: Appropriation account for the year ended 31 December 2018. Also, don't forget to bring down balances on current accounts as shown in the illustration.

Tip

It is easy to forget that interest on drawings is an addition to the profit for the year in the appropriation account. Unfortunately, many students make the common mistake of deducting this item.

During the year ended 31 December 2018, the partners' drawings were:

- Jackie: withdrew $15 000 on 30 June 2018
- Keri: withdrew $6000 on 31 March 2018 and $16000 on 30 September 2018.

The partnership made a profit of $32 040 for the year ended 31 December 2018.

Calculate:

a. the interest on Jackie's drawings
b. the interest on Keri's drawings
c. each partner's share of the profits for the year ended 31 December 2018.

11. Preparing partners' accounts, interest on drawings given

Donna and Elwin entered in to partnership on 1 January 2018. The partners agreed that:

- interest on drawings should be charged at 7% per annum
- each partner should receive interest on fixed capital of 10% per annum
- Elwin should receive an annual salary of $12000
- remaining profits or losses should be shared equally.

The following additional information is available.

	Fixed capital	Drawings for the year ended 31 December 2018	Interest on drawings for the year ended 31 December 2018
	$	$	$
Donna	160000	22000	850
Elwin	140000	24000	1150

The partnership made a profit of $58000 during the year ended 31 December 2018.

Prepare the following:

a. partners' capital accounts
b. partners' drawings accounts
c. the appropriation account for the year ended 31 December 2018
d. partners' current accounts.

12. Preparing partners' accounts, interest on drawings given

Nicholas and Penelope entered into partnership on 1 April 2017. The partners agreed that:

- interest on drawings should be charged at 12% per annum
- interest should be allowed on fixed capital at 10% per annum
- Nicholas should receive a salary of $60000 per annum

- remaining profits and losses should be shared in the ratio Nicholas, Penelope 3 : 2.

The following additional information is available.

	Fixed capital	Drawings for the year ended 31 March 2018	Interest on drawings for the year ended 31 March 2018
	$	$	$
Nicholas	360 000	75 000	4 620
Penelope	600 000	91 000	7 020

The partnership made a profit of $216 000 during the year ended 31 March 2018.

Prepare the following:

a. partners' capital accounts
b. partners' drawings accounts
c. the appropriation account for the year ended 31 March 2018
d. partners' current accounts.

13. Preparing partners' accounts, including the calculation of interest on drawings

Alex, Bradley and Candace are in partnership. The partners made an agreement that profits and losses should be shared as follows:

- Interest on drawings should be charged at 6% per annum.
- Interest should be allowed on capital at 10% per annum.
- Bradley should receive a salary of $9 000 per annum for taking charge of the day-to-day running of the business.
- Remaining profits or losses should be shared equally.

The profit for the year ended 31 March 2018 was $48 500.

The following additional information is available.

	Fixed capital	Current account balances 1 April 2017
	$	$
Alex	80 000	3 200 Cr
Bradley	50 000	4 900 Cr
Candace	70 000	2 100 Dr

Partners' drawings during the year ended 31 March 2018 were:

- Alex: $18 000 on 30 November 2017
- Bradley: $12 000 on 30 June 2017 and $10 000 on 30 September 2017
- Candace: $20 000 on 31 December 2017.

Prepare the following:

a. partners' capital accounts
b. partners' drawings accounts

c. the appropriation account for the year ended 31 March 2018
d. partners' current accounts.

14. Preparing partners' accounts, including the calculation of interest on drawings

Ryan, Sonya and Tara are in partnership. The partners made an agreement that profits and losses should be shared as follows:

- Interest should be charged on drawings at 12% per annum.
- Interest should be allowed on capital at 8% per annum.
- Ryan should receive a salary of $33 000 per annum for managing the business.
- Tara should receive a salary of $15 000 per annum for being responsible for promoting the business.
- Remaining profits or losses should be shared in the ratio Ryan, Sonya, Tara 2 : 2 : 1.

Partners' drawings during the year ended 31 July 2018 were:

- Ryan: $24 000 on 30 November 2017 and $39 000 on 31 March 2018.
- Sonya: $51 000 on 31 December 2017 and $36 000 on 31 May 2018.
- Tara: $39 000 on 31 January 2018 and $39 000 on 30 June 2018.

The profit for the year ended 31 July 2018 was far lower than the partners had expected and amounted to $87 390.

The following additional information is available.

	Fixed capital	Current account balances 1 August 2017
	$	$
Ryan	660 000	5 300 Dr
Sonya	540 000	8 100 Cr
Tara	300 000	2 700 Dr

Prepare the following:

a. partners' capital accounts
b. partners' drawings accounts
c. the appropriation account for the year ended 31 July 2018
d. partners' current accounts.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

8.2 More about accounting for partnerships

Objectives

By the end of this unit you will be able to:

- prepare fluctuating capital accounts of partners
- prepare accounting records for the formation of a partnership
- share profits or losses where there is no agreement between partners
- prepare financial statements of a partnership.

Fluctuating capital accounts

In some partnerships, the partners decide that it is unnecessary to keep separate current accounts and drawings accounts, and instead all transactions affecting the partners are recorded in one capital account for each partner. This arrangement – usually referred to as **fluctuating capital accounts** – can apply where the partners do not think it likely that any individual partner will make any significant change to their capital contributions. It is also a possibility where the partnership agreement is relatively simple and does not include any provision concerning interest on capital, since this would be very difficult to calculate with frequent changes in capital balances.

Key term

Fluctuating capital accounts: where partners have just one account to record their capital contributions, drawings and shares of profits and losses.

Illustration 6

Fluctuating capital accounts

Shane, Tamara and Urban are in partnership, sharing profits and losses in the ratio 3 : 2 : 5. The partners do not have any agreement about fixed capital and so maintain just one account to record the affairs of each partner.

On 1 January 2018, the balances on the partners' capital accounts were: Shane $248 550, Tamara $172 356, Urban $495 600.

During the year ended 31 December 2018, the partners' drawings were: Shane $34 360, Tamara $48 490, Urban $62 350.

The partnership agreement provides that Tamara should be given a partnership salary of $40 000 per annum for managing the business.

The partnership made a profit of $148 000 during the year ended 31 December 2018.

The partnership's appropriation account and fluctuating capital accounts are as follows.

Shane, Tamara and Urban
Appropriation account for the year ended 31 December 2018

	$	$
Profit for the year		148 000
Less salary, Tamara		40 000
		108 000
Shares of residual profit:		
Shane	32 400	
Tamara	21 600	
Urban	54 000	
		108 000

Capital accounts

Dr			Shane	Tamara	Urban				Shane	Tamara	Urban	Cr
			$	$	$				$	$	$	
Dec	31	Drawings	34 360	48 490	62 350	Jan	1	Balances	248 550	172 365	495 600	
	31	Balances c/d	246 590	185 475	487 250	Dec	31	Salary		40 000		
							31	Share of profits	32 400	21 600	54 000	
			280 950	233 965	549 600				280 950	233 965	549 600	
						Jan	1	Balances b/d	246 590	185 475	487 250	

Notes:

- If preferred, each partner could have a separate capital account, rather than the columnar version shown.
- With fluctuating capital accounts, it is not easy to tell whether any partner has withdrawn more than their share of profits during the year – this could be considered a disadvantage of this method.

Practice questions

15. Preparing fluctuating capital accounts

Walter and Xena are in partnership, sharing profits and losses in the ratio 4 : 1. The partners have agreed not to maintain separate current accounts. On 1 November 2017, the balances on the partners' capital

accounts were:

	$
Walter	382 490
Xena	145 280

During the year ended 31 October 2018, the partners' drawings were:

	$
Walter	69 500
Xena	40 270

The partners have agreed that Xena is entitled to a partnership salary of $35 000 per annum.

During the year ended 31 October 2018, the partnership made a profit of $105 000.

Prepare:

a. an appropriation account for the year ended 31 October 2018
b. the partners' capital accounts.

16. Preparing fluctuating capital accounts

Jenny and Keith are in partnership, sharing profits and losses in the ratio 2 : 3. The partners have agreed not to maintain separate current accounts. On 1 August 2017, the balances on the partners' capital accounts were:

	$
Jenny	284 570
Keith	345 800

During the year ended 31 July 2018, the partners' drawings were:

	$
Jenny	55 490
Keith	62 440

The partners have agreed that Jenny is entitled to a partnership salary of $33 000 per annum and Keith a partnership salary of $18 000 per annum.

During the year ended 31 July 2018, the partnership made a loss of $25 000.

Prepare:

a. an appropriation account for the year ended 31 July 2018
b. the partners' capital accounts.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Sole traders agree to form a partnership

Quite often a partnership is formed when two (or more) sole traders agree to amalgamate their businesses into one.

Where this is the case, each sole trader needs to close his or her books of account, and then open a new set of books for the partnership in which the combined assets, liabilities and the appropriate capital contributions of each partner are recorded.

The formal process should make use of journal entries.

Illustration 7

Sole traders agreeing to form a partnership

Monique and Nigel have agreed to form a partnership that will begin trading on 1 July 2018. Monique and Nigel each own their own businesses.

Monique's statement of financial position (balance sheet) prior to the formation of the partnership was as follows.

Monique

Statement of financial position (balance sheet) at 30 June 2018

	$		$
Premises	320 000	Capital	372 000
Vehicle	30 000		
Inventory	20 000	Bank loan	35 000
Accounts receivable	25 000		
Bank	12 000		
	407 000		407 000

Nigel's statement of financial position (balance sheet) prior to the formation of the new partnership was as follows.

Nigel

Statement of financial position (balance sheet) at 30 June 2018

	$		$
Equipment	18 000	Capital	37 000
Inventory	14 000		
Accounts receivable	8 000	Accounts payable	8 000
Bank	5 000		
	45 000		45 000

A journal entry will be prepared in the new partnership's books to record Monique's contribution.

Journal				
Date		Details	Dr	Cr
			$	$
July	1	Premises	320 000	
		Vehicle	30 000	
		Inventory	20 000	
		Accounts receivable	25 000	
		Bank	12 000	
		Bank loan		35 000
		Capital (Monique)		372 000
		Entries to record Monique's contributions to the business		

The journal entry to record Nigel's contribution will be as follows.

Journal				
Date		Details	Dr	Cr
			$	$
July	1	Equipment	18 000	
		Inventory	14 000	
		Accounts receivable	8 000	
		Bank	5 000	
		Accounts payable		8 000
		Capital (Nigel)		37 000
		Entries to record Nigel's contributions to the business		

The first (summarised) statement of financial position (balance sheet) of the new partnership will be as follows.

Monique and Nigel Summarised statement of financial position (balance sheet) at 1 July 2018			
	$		$
Premises	320 000	Capital accounts:	
Vehicle	30 000	Monique	372 000
Equipment	18 000	Nigel	37 000
Inventory	34 000		
Accounts receivable	33 000	Bank loan	35 000
Bank	17 000	Accounts payable	8 000
	452 000		452 000

Practice questions

17. Sole traders agreeing to form a partnership

Natasha and Omare are sole traders. They have agreed to form a partnership that will start trading on 1 September 2018.

The statements of financial position (balance sheets) of each business are shown below.

Natasha

Statement of financial position (balance sheet) at 31 August 2018

	$		$
Equipment	64 000	Capital	111 000
Inventory	27 000		
Accounts receivable	11 000	Accounts payable	22 000
Bank	31 000		
	133 000		133 000

Omare

Statement of financial position (balance sheet) at 31 August 2018

	$		$
Vehicles	48 000	Capital	79 000
Inventory	19 000		
Accounts receivable	15 000	Bank overdraft	3 000
	82 000		82 000

It was agreed that all the assets and liabilities of each business should be transferred to the new partnership, which would begin trading on 1 September 2018.

Prepare:

a. a journal entry to record Natasha's contribution to the partnership on 1 September 2018

b. a journal entry to record Omare's contribution to the partnership on 1 September 2018

c. the opening statement of financial position (balance sheet) of the new partnership on 1 September 2018.

18. Sole traders agreeing to form a partnership

Rajiv and Sharla are sole traders. They have agreed to form a partnership that will start trading on 1 May 2018.

The statements of financial position (balance sheets) of each business are shown below.

Rajiv
Statement of financial position (balance sheet) at 30 April 2018

	$		$
Premises	290 000	Capital	342 000
Furniture and fittings	38 000		
Inventory	29 000	Bank loan	25 000
Bank	22 000	Accounts payable	12 000
	379 000		379 000

Sharla
Statement of financial position (balance sheet) at 30 April 2018

	$		$
Equipment	75 000	Capital	104 000
Furniture and fittings	28 000		
Inventory	17 000	Bank loan	10 000
Accounts receivable	9 000	Bank overdraft	8 000
		Accounts payable	7 000
	129 000		129 000

It was agreed that all the assets and liabilities of each business should be transferred to the new partnership, which would begin trading on 1 May 2018.

Prepare:

a. a journal entry to record Rajiv's contribution to the partnership on 1 May 2018
b. a journal entry to record Sharla's contribution to the partnership on 1 May 2018
c. the opening statement of financial position (balance sheet) of the new partnership on 1 May 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Sharing profits and losses where there is no agreement

In some partnerships, the partners do not make any formal written agreement about sharing profits and losses. This may not cause any problems as long as the partners can come to some spoken agreement. However, there is always the risk of a dispute in these situations. Where partners cannot agree, the correct procedure is to implement the terms of the Partnership Act of 1890, which requires:

- profits and losses to be shared equally between partners
- no appropriations of profit to be made, such as interest on capital, salary, etc.
- no interest to be charged on drawings.

Key terms

Interest on a partner's loan: where there is no agreement in place, a partner who has made a loan to a partnership over and above the capital contribution is entitled to interest at 5% per annum. The interest must be charged to the income statement (profit and loss section) as an expense.

In addition, the Act makes provision for any partner who has made a loan to the partnership to receive interest at 5% per annum. (This interest rate may vary in certain countries.)

Interest on a partner's loan should be treated in the same way as any other interest charge: that is, it should be charged as an expense in the income statement. In other words, it would not be correct to deduct the interest in the appropriation account.

Illustration 8

Sharing profits and losses where there is no agreement

Jarel, Kisha and Leela are in partnership. They have no formal agreement about how to share profits or losses.

Kisha made a loan to the partnership of $40 000 some years ago. There is no agreement between the partners about the interest to be provided on this loan.

During the year ended 31 December 2018 the partnership made a profit of $92 000 before allowing for interest on Kisha's loan.

The partners cannot agree how to share the profit for the year ended 31 December 2018.

Step 1: Calculate the profit for the year having allowed for interest (at 5% per annum) on Kisha's loan: $92 000 less interest of $2 000 (5% × $40 000) = $90 000.

Step 2: Divide the profit of $90 000 equally between the partners, so Jarel, Kisha and Leela will each receive $30 000.

Practice questions

19. Partnerships with no profit/loss-sharing agreement

Tricia, Ulrick and Walter are in partnership. The partners have no formal agreement about how to share profits and losses. Walter made a loan to the business of $50 000 some years ago, but without any agreement about the interest to be paid on the loan.

During the year ended 30 November 2018, the partnership made a profit (before charging interest on Walter's loan) of $85 000.

The partners are unable to agree how this profit should be shared.

Calculate each partner's share of the profit for the year ended 30 November 2018.

20. Partnerships with no profit/loss-sharing agreement

Ryan and Stacey are in partnership with fixed capital of $200 000 and $150 000, respectively. The partners do not have a formal agreement about how to share profits.

During the year ended 31 December 2018, the partnership was profitable and Ryan made an attempt to show Stacey how he thought the profits should be shared. The following statement was prepared by Ryan.

Statement of profit shares for the year ended 31 December 2018		
	$	$
Profit for the year (before interest on loan)	135 000	
Less interest on Ryan's loan of $80 000	8 000	
Profit after interest on loan		127 000
Less salaries:		
Ryan	20 000	
Stacey	30 000	
		50 000
		77 000
Shares of residual profit:		
Ryan (in proportion to fixed capital)	44 000	
Stacey (in proportion to fixed capital)	33 000	
		77 000

Stacey does not agree with Ryan's ideas about how the profits should be shared.

Assuming Ryan and Stacey cannot agree, calculate how the profit for the year ended 31 December 2018 should be shared between the partners.

Preparing financial statements of a partnership

A partnership's financial statements will consist of the following:

- income statement – which will be very similar to that of a sole trader – but remember that interest on a partner's loan should be included in the income statement as an expense
- appropriation account
- statement of financial position (balance sheet).

The statement of financial position (balance sheet) of a partnership will record assets and liabilities in exactly the same way as that of a

sole trader. However, the capital section will need to reflect the fact that there are a number of owners and that possibly each partner has a capital account and a current account.

It is suggested that where you have a choice you use the version of the statement of financial position (balance sheet) which just shows the final balances. It will save you a lot of time!

Illustration 9

Preparing a partnership statement of financial position (balance sheet)

Here is some (summarised) information about the partnership of Francis and Geeta at 31 October 2018:

	$
Non-current assets	640 000
Current assets	50 000
Non-current liability:	
Loan from Francis	20 000
Current liabilities	25 000
Capital accounts:	
Francis	400 000
Geeta	240 000

The current accounts of the partners are as shown below:

Dr **Current accounts** **Cr**

			Francis $	Geeta $				Francis $	Geeta $
Oct	31	Drawings	105 000	55 000	Oct	1	Balances	11 000	15 000
	31	Balance c/d		9 000		31	Interest on capital	40 000	24 000
						31	Residual profits	50 000	25 000
						31	Balance c/d	4 000	
			105 000	64 000				105 000	64 000
Nov	1	Balance b/d	4 000		Nov	1	Balance b/d		9 000

The statement of financial position (balance sheet) of the partnership will appear as follows.

Francis and Geeta Statement of financial position (balance sheet) at 31 October 2018			
		$	$
Non-current assets			640 000
Current assets		50 000	
Less current liabilities		25 000	
Net current assets			25 000
			665 000
Less non-current liabilities:			
Loan from Francis			20 000
			645 000
Capital accounts	Francis	Geeta	
	400 000	240 000	640 000
Current accounts:			
Opening balances	11 000	15 000	
Interest on capital	40 000	24 000	
Residual profits	50 000	25 000	
	101 000	64 000	
Drawings	(105 000)	(55 000)	
	(4 000)	9 000	5 000
			645 000

An alternative presentation of the statement of financial position (balance sheet) may be required, where only the final balances of the current accounts are shown. In this version, the second part of the statement of financial position (balance sheet) would appear as follows.

	$	$	$
Capital accounts	Francis	Geeta	
	400 000	240 000	640 000
Current accounts	(4 000)	9 000	5 000
			645 000

Notes:

- It is important to keep the capital accounts and the current accounts of the partners distinct in the second part of the statement of financial position (balance sheet), so the capital account balances are shown with a subtotal line.
- In this version of the statement of financial position (balance sheet), the current accounts are shown in detail. Where this is required, provide each partner with a column and start the details with the opening balance (which could, of course, be negative). List all the positive items first and then deduct negative items (such as drawings). The column should end with the current account balance at the statement of financial position (balance sheet) date. Use brackets to indicate negative figures.

Analysing the performance of partnerships

All the skills you have learned in calculating ratios, comparing performance and making recommendations for improvement can be applied to a partnership.

It is worth noting that in the case of a partnership, the return on investment for the business would be found by taking the profit for the

year and relating this to the capital invested by the partners (which should take account of both capital and current account balances):

$$\frac{\text{Profit for the year}}{\text{Total of partners' capital and current account balances}} \times 100$$

The capital and current account balances could be those at the beginning of the year, those at the end of the year, or an average of these figures.

Illustration 10

Calculating a partnership's return on investment

Returning to the information in Illustration 4, it is possible to work out the return on investment for the partnership (using the opening balances of the current and capital accounts):

$$\frac{\text{Profit for the year}}{\text{Total of partners' capital and current account balances}} \times 100$$

$$= \frac{\$139\,000^{*}}{\$666\,000} = 20.87\%$$

*Interest on capital ($40 000 + $20 000) + residual profits ($50 000 + $25 000)

It is also possible to work out the return on capital invested for each partner, providing more interesting information for the owners. Here are the calculations:

Francis: $\frac{\text{Profit for the year}}{\text{Total of opening capital and current account balances}} \times 100$

$$= \frac{\$90\,000^{*}}{\$411\,000} = 21.90\%$$

*Interest on capital $40 000 + residual profit $50 000

Geeta: $\frac{\text{Profit for the year}}{\text{Total of opening capital and current account balances}} \times 100$

$$= \frac{\$49\,000^{*}}{\$255\,000} = 19.22\%$$

*Interest on capital $24 000 + residual profit $25 000

Tip

When you calculate the return on a partner's investment, don't forget to include the current account balance of the partner as well as the capital account balance.

Practice questions

21. End-of-year financial statements of a partnership

Ishaka and Joshua are in partnership sharing profits and losses: Ishaka 60%, Joshua 40%.

At the end of the financial year, 30 September 2018, the following balances were extracted from the books of the partnership after calculation of the gross profit for the year.

Trial balance at 30 September 2018		
	Dr	Cr
	$	$
Accounts payable		24 000
Accounts receivable	20 000	
Capital accounts:		
Ishaka		240 000
Joshua		200 000
Cash at bank	31 000	
Current accounts:		
Ishaka	4 000	
Joshua		7 000
Drawings:		
Ishaka	47 000	
Joshua	35 000	
Gross profit		237 000
Inventory	63 000	
Loan account (Ishaka)		40 000
Non-current assets:		
Cost	820 000	
Provision for depreciation at 1 October 2017		340 000
Operating expenses	68 000	
	1 088 000	1 088 000

Additional information:

- Non-current assets should be depreciated by 20% per annum using the reducing-balance method.
- Operating expenses due but unpaid at 30 September 2018 totalled $5 000.
- The partners have decided that it is necessary to create a provision for doubtful debts amounting to 5% of accounts receivable at 30 September 2018.
- The partnership agreement includes the following terms:
  - Ishaka is entitled to interest of 10% per annum on her loan.
  - Interest is charged on drawings. For the year under review interest on drawings amounts to: Ishaka, $6 000; Joshua $4 000.
  - Joshua is to receive a partnership salary of $28 000 per annum.

Prepare:

a. an income statement (trading and profit and loss account) for the year ended 30 September 2018

b. an appropriation account for the year ended 30 September 2018

c. partners' current accounts
d. a statement of financial position (balance sheet) at 30 September 2018. The statement of financial position (balance sheet) should show only the balances on the partners' current accounts at this date.

22. End-of-year financial statements of a partnership

Geeta, Henry and Irvin are in partnership sharing profits and losses: Geeta 20%, Henry 40%, Irvin 40%. The following trial balance was extracted from the business's books of account on 31 August 2018, the last day of the partnership's financial year.

Trial balance at 31 August 2018

	Dr $000	Cr $000
Accounts payable		18
Accounts receivable	40	
Bank overdraft		12
Capital accounts:		
Geeta		260
Henry		310
Irvin		370
Current accounts:		
Geeta	6	
Henry		8
Irvin	9	
Discounts	11	15
Drawings:		
Geeta	44	
Henry	61	
Irvin	52	
Furniture and equipment:		
Cost	220	
Provision for depreciation, 1 September 2017		66
General expenses	19	
Gross profit		291
Insurance	27	
Inventory, 31 August 2018	68	
Premises at cost	660	
Provision for doubtful debts, 1 September 2017		6
Wages and salaries	139	
	1356	1356

Additional information (in $000):

- Insurance, $3, was prepaid at 31 August 2018.
- Wages and salaries due but unpaid totalled $12 at 31 August 2018.
- Depreciation of $66 should be provided on furniture and fittings at 20% per annum using the straight-line method.
- The provision for doubtful debts should be maintained at 5% of accounts receivable.
- The partnership agreement includes the following terms:
  - Interest should be charged on drawings. For the year under review, the interest to be charged has been calculated as follows: Geeta $4 000, Henry $5 000, Irvin $7 000.
  - Geeta is entitled to receive a partnership salary of $28 000 per annum.
  - Partners are entitled to receive interest on capital at the rate of 10%.

Prepare:

a. an income statement (trading and profit and loss account) for the year ended 31 August 2018

b. an appropriation account for the year ended 31 August 2018

c. partners' current accounts

d. a statement of financial position (balance sheet) at 31 August 2018. The statement of financial position (balance sheet) should show only the balances on the partners' current accounts at this date.

23. Analysing the performance of a partnership

Using the information prepared in answer to Question 21, calculate the following ratios for Ishaka and Joshua:

a. Current ratio

b. Acid test ratio

c. Return on investment

Ishaka and Joshua have been informed that a similar business has obtained the following results.

Current ratio	1.85 : 1
Acid test ratio	1.40 : 1
Return on investment	18.50%

d. Comment on the performance of Ishaka and Joshua's business compared to the similar business.

e. Where a ratio is out of step with that for the similar business, make one suggestion (in each case) on how the partners could improve their business's performance.

24. Analyzing the performance of a partnership

Using the information prepared in answer to Question 22, calculate the following ratios for Geeta, Henry and Irvin's partnership:

a. current ratio

b. acid test ratio

c. return on investment (using the final balances of the partners' personal accounts).

Geeta, Henry and Irvin have reported that the equivalent ratios for the previous financial year were as follows.

Current ratio	3.1 : 1
Acid test ratio	1.4 : 1
Return on investment	5.50%

d. Comment on the performance of Geeta, Henry and Irvin's business compared to the previous year.

e. Where a ratio has declined since last year, make one suggestion (in each case) on how the partners could improve their business's performance.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. Shamilla and Trim are in partnership. They have capital contributions of $80 000 and $120 000, respectively. During the year, they made a profit of $200 000. Shamilla had drawings of $60 000 and Trim $40 000. No partnership agreement exists.

   What amount is Trim entitled to receive as his share of the profit?

   A $50 000
   B $80 000
   C $100 000
   D $120 000

2. Xavier and Yvonne are partners in a business. The following current account of Xavier has been prepared by an inexperienced bookkeeper.

	$		$
Interest on capital	36 000	Balance b/d	1 500
Salary	45 000	Drawings	75 000
Balance c/d	85 500	Profit	90 000
	166 500		166 500

   Assuming Xavier's opening balance was correctly recorded, the correct closing balance on his current account is:

   A $25 500
   B $67 500
   C $82 500
   D $97 500

3. A partnership appropriation account should include:

   A shares of residual loss, partnership salaries, drawings, interest on partners' loans
   B shares of residual profit, partnership salaries, drawings, interest on capitals
   C shares of residual loss, partnership salaries, interest on partners' loans
   D shares of residual profit, partnership salaries, interest on drawings, interest on capitals

4. In the books of a partnership, the ledger entries for interest on drawings should be:

   A Debit partners' current accounts
   Credit appropriation account
   B Debit appropriation account
   Credit partners' current accounts
   C Debit partners' current accounts
   Credit partners' drawings accounts
   D Debit partners' drawings accounts
   Credit partners' current accounts

5. Mala and Navin are in partnership, with capital of $240 000 and $120 000, respectively. The partners are entitled to interest on capital at 10% per annum and remaining profits are shared equally. For the year ended 31 December 2018, the business made a profit of $144 000.

   Mala's total share of profits from the business ended 31 December 2018 is:

   A $54 000
   B $72 000
   C $78 000
   D $96 000

6. In the books of a partnership, interest on drawings should be debited to:

   A the bank account
   B partners' current accounts
   C partners' drawings accounts
   D the appropriation account

7. During the year ended 31 October 2018, the partnership of Danielle and Erskin made a profit of $85 000. Partners share profits

equally after charging interest on drawings. For the year ended 31 October 2018, interest on drawings was: Danielle $4000, Erskin $7000.

What is Erskin's net share of the profits for the year?

A $55000 C $41000
B $44000 D $30000

8. Renea and Stephen agreed to go into partnership. Renea was a sole trader and her business's statement of financial position (balance sheet) before the formation of the partnership was as follows.

Renea Statement of financial position (balance sheet)			
	$		$
Premises	330000	Capital	374000
Vehicle	29000		
Inventory	40000	Bank loan	40000
Bank	35000	Accounts payable	20000
	434000		434000

Renea is to transfer her business's assets and liabilities to the partnership, subject to the following conditions:

- Renea should discharge the payables using the business's funds.
- She should keep the business's vehicle for her private use.
- The premises should be valued at $450000.

What was Renea's capital contribution to the new partnership?

A $445000 C $474000
B $465000 D $494000

9. Jenny and Keith do not have a partnership agreement. The following information is available.

	Jenny	Keith
	$	$
Fixed capitals	160000	80000
Loan		40000

The partnership made a loss of $60000 during the year ended 30 September 2018. Loan interest had been ignored in arriving at this figure.

Keith's net share of this loss should be:

A $20000 C $30000
B $29000 D $31000

10. Urban and Victoria are in partnership. They do not maintain separate current accounts.

The following information is available concerning Urban for the year ended 31 December 2018:

	$
Capital account balance 1 January 2018	65000
Drawings for the year	32000
Interest on drawings	4000
Salary	28000
Share of loss for the year	6000

The balance of Urban's capital account at 31 December 2018 was:

A $65000 C $59000
B $51000 D $63000

PAPER 2

Case Study

Dee, Michelle and Thomas decided to form a partnership several years ago.

a. State *two* advantages of forming a partnership.

The partners made a formal agreement about how to share profit and losses.

b. Explain *one* benefit of having a formal agreement about sharing profits and losses.

The agreement includes the following terms:

- Thomas is to be credited with interest of 8% per annum on the loan he made to the partnership.
- Interest should be charged on drawings at the rate of 5% per annum.
- Partners are entitled to receive interest on capital at the rate of 10% per annum.
- Michelle is to receive a salary of $18 000 per annum for acting as manager.
- Remaining profits and losses are to be shared Dee: Michelle : Thomas, 2 : 3 : 5.

The following list of balances appeared in the books of the partnership on 31 December 2018 after the preparation of the income statement for the year ended on that date.

	$
Accounts payable	9 730
Accounts receivable	16 800
Capital accounts	
Dee	30 000
Michelle	40 000
Thomas	80 000
Cash at bank	4 550
Current accounts at 1 January 2018 (credit)	
Dee	1 480
Michelle	5 320
Thomas	2 860
Drawings	
Dee	17 400
Michelle	22 950
Thomas	24 880
Expenses owing	490
Inventory	14 870
Loan (Thomas)	8 000
Loan interest (Thomas)	640
Net profit	54 000
Non-current assets	
Cost	170 000
Provision for depreciation	38 500
Prepaid expenses	410
Provision for doubtful debts	840

Note: interest on drawings for the year ended 31 December 2018 has been calculated as: Dee $580, Michelle $730, Thomas $890.

c. Prepare an appropriation account for the year ended 31 December 2018.

d. Prepare the partners' current accounts. Balance the accounts at 31 December 2018.

e. Prepare a statement of financial position (balance sheet) at 31 December 2018.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

9 Accounting for limited liability companies, co-operatives and non-profit organizations

Setting the scene

In this chapter the opportunity will arise to prepare financial statements for other forms of organization.

Limited companies are particularly important because they dominate the economy in so many countries. Some public companies are huge multi-national businesses worth billions of dollars.

This chapter also includes financial statements for two other forms of organization where making a profit is not the main objective: co-operative societies, and clubs and societies.

Syllabus coverage

	Syllabus	Unit
1	Identify the essential features of limited liability companies, co-operatives and non-profit organizations	9.1 9.3 9.4
2	Identify the types of limited liability companies, co-operatives and non-profit organizations	9.1
3	Outline the advantages and disadvantages of a limited liability company	
4	Describe the various methods of raising capital available to limited liability companies and co-operatives	
5	Identify the various types of shares and the rights of the owners of each type of share	
6	Prepare journal entries to record the issue of shares and debentures	
7	Calculate dividend payments for various types of shares	
8	Appropriate profits between dividends and reserves	9.2
9	Prepare the final accounts of limited liability companies and co-operatives	9.2 9.3
10	Analyze performance and position using ratios	
11	Prepare receipts and payment accounts for non-profit organizations	9.4

9.1 An introduction to accounting for limited companies

Objectives

By the end of this unit you will be able to:

- identify the key features of a limited liability company and compare these to a sole trader and a partnership
- describe the sources of finance for a limited company, including shares and debentures
- prepare the journal entries to record the issue of shares and debentures
- prepare the shareholder's equity section of a limited company's statement of financial position (balance sheet)

What is a limited liability company?

A **limited liability company** is an organization owned by its shareholders, whose liability is limited to its share capital. In other words, a limited liability company is a business whose owners' liability for the business's debts is limited to the amount of money that they invested in shares in the business, so their personal possessions cannot be lost. The owner of a company is therefore a shareholder. A limited company has a separate legal entity from that of its shareholders in that it can sue, and be sued, in its own right.

Key term

Limited liability company: an organization owned by its shareholders, whose liability is limited to their share capital.

The following table shows the differences between a sole trader, a partnership and a limited company.

Sole trader	Partnership	Limited company
One owner (sole trader)	Two or more owners (partners)	Unlimited ownership (shareholders)
Unlimited liability	Unlimited liability	**Limited liability**
Sole trader is entitled to all of the profits	The profits are shared among the partners	**Shareholders** receive a dividend as their share of profits
Sole trader has all the risk	Risk is shared between the partners according to their partnership agreement	Risk is limited to the amount invested in shares
Sole trader does not have separate legal entity	Partnership does not have separate legal entity	Limited company has separate legal entity from its owners
Sole trader is not required to have an audit or publish accounts	Partnership is not required to have an audit or publish accounts	Limited company must have an audit and publish accounts
Sole trader has full responsibility for running the business	Responsibility of running partnership shared among the partners	Company run by **directors** who are not necessarily the shareholders
Internal capital is from sole trader	Internal capital is from each partner; each new partner brings extra capital	Capital is raised on the issue of shares
Ideas and workload are limited to the sole trader	Ideas and workload are shared among partners	Directors are appointed by shareholders to have the ideas and to take on the workload

Key terms

Limited liability: the liability of any shareholder to the debts of the company is limited to the amount of their fully paid-up shares.

Shareholders: the owners of the share capital of a limited company.

Directors: officials appointed by the shareholders to manage the company for them. A director can be, but does not have to be, a shareholder.

Shares: the capital of a limited company is split into parts called shares.

Nominal value: the price description of an issued share under the company's constitution.

Dividend: the amount given to shareholders as their share of the profits of the company.

Share premium: the difference between the nominal value of shares and the price at which they are issued.

Ordinary shares: shares entitled to dividends after the preference shareholders have been paid their dividends. Ordinary shares receive a variable rate of dividend dependent on the level of profit. Ordinary shares normally carry voting rights.

Sources of finance for a limited liability company

Source of finance 1: shares

The capital of a limited company is divided into small units of equal amounts, called **shares**. The value of a share in a limited company could be as low as 1¢, but $1 shares are more typical, and shares with other "face values" are possible. The face value of shares is called the **nominal value**. To be a member (owner) of a limited company, a person must become a shareholder by buying one or more of the available shares. Private companies (Ltd) sell shares to known individuals such as family and friends, whereas public limited companies (plc) sell their shares to the general public. Public limited companies tend to be larger than private limited companies as they can raise more funds from a wider range of people.

If a company loses all its assets, shareholders will lose their investment. If a shareholder has paid in full for his shares then his liability is limited to what he has paid, whereas a shareholder who has not yet paid in full for his shares can only be asked to pay any balance outstanding. This is called limited liability.

The return a shareholder receives on his or her investment is called a **dividend**. A dividend can be paid at some point during the financial year (called an interim dividend) and/or declared at the end of the financial year, once profits are known (a final dividend).

Alternatively, many people invest in shares not for the dividend, but for capital growth. If shares are issued at their nominal value, they are referred to as "issued at par". If shares are issued at a higher price than their nominal value, a **share premium** is created. Both the nominal value and share premium are shown in the financial statements. The market price of a share can fluctuate daily depending on what individuals are willing to pay for shares, and this is not shown in the financial statements. Capital growth is achieved if the shares are sold for a higher market price than their original purchase price.

Types of shares

Ordinary shares are the most common type of share issued. An ordinary shareholder receives a variable dividend based on the level of profit, but if there is insufficient cash or profit, or both, then dividends do not have to be paid. There is no maximum amount of dividend that can be paid, but likewise there is no minimum. Each share represents one vote at the annual general meeting (AGM), so the more shares a shareholder owns, the greater the control they can have. Various decisions are voted on at the AGM, including the rate of dividend. Ordinary shareholders receive their dividend out of profits after preference shareholders (discussed below). Many ordinary

shareholders therefore invest in shares, not for the possibility of an annual dividend, but for capital growth.

The dividends to be paid on ordinary shares can be calculated in different ways.

Illustration 1

Calculating dividends on ordinary shares using a percentage

A limited company has 100 000 ordinary shares of $1 each. A dividend is declared at 6%.

A shareholder with 1 000 shares would receive a dividend of 6% of the face value of the shareholder's investment = $1\,000 \times \frac{6}{100} = \$60$.

Illustration 2

Calculating dividends on ordinary shares using a rate per share

A limited company has 100 000 ordinary shares of $1 each. A dividend is declared at 8¢ per share.

A shareholder with 1 000 shares would receive a dividend of $1\,000 \times \$0.08 = \$80$.

Illustration 3

Calculating dividends on ordinary shares with a nominal value of less than $1

A limited company has raised $200 000 from issuing ordinary shares with a nominal value of 50¢ each. A dividend is declared of 2¢ per share.

The number of issued shares is $\frac{\$200\,000}{\$0.50} = 400\,000$ shares.

The total dividend is $400\,000 \times \$0.02 = \$8\,000$.

Preference shares have a preferential right to dividends over ordinary shareholders and so receive their dividend first. As they are more likely to receive a dividend, they are seen as the shares with the lower risk. However, the amount of dividend that they receive is at a fixed percentage of the face value of their investment, so in periods of high profits it is possible that their dividend will be lower than that of an ordinary shareholder. A preference shareholder does not receive a vote at the AGM and is therefore seen as having less control than ordinary shareholders.

Key term

Preference shares: shares entitled to a fixed rate of dividend that is appropriated ahead of any ordinary share dividend. Normally, preference shares are seen as low risk and do not carry voting rights.

Tip

Preference shares can be either cumulative or non-cumulative. If dividends are not paid in one year due to a lack of funds or profits, then in the case of cumulative preference shares the shareholders carry forward their right to the dividend to the next year, and so on, until the accumulating dividend rights can be paid. Non-cumulative preference shares do not have this advantage.

Illustration 4

Calculating dividends on preference shares

A limited company has 200 000 8% preference shares of $1 each. A dividend is declared.

A shareholder with 1 000 shares would receive a dividend of $1\,000 \times \frac{8}{100} = \$80$.

Summary: how to calculate dividends

Share details	Rate	Calculation of dividend
20 000 $1 ordinary shares	5¢ per share	$20\,000 \times \$0.05 = \$1\,000$
40 000 $1 preference shares	4%	$40\,000 \times \frac{4}{100} = \$1\,600$
500 000 $2 ordinary shares	2¢ per share	$500\,000 \times \$0.02 = \$10\,000$
100 000 50¢ preference shares	5%	$\frac{100\,000 \text{ shares}}{2} \times \frac{5}{100} = \$2\,500$

Interim and final dividends

Preference shareholders receive a fixed rate of dividend. The total amount paid to preference shareholders cannot exceed the fixed rate. So, it does not matter to a preference shareholder if there is an interim dividend as well as a final dividend, because these two dividends will equal the fixed rate. However, an ordinary shareholder can receive two dividend payments that are totally independent of each other and for which there is no maximum.

Illustration 5

Calculating interim and final dividends on preference shares and ordinary shares

A limited company has issued share capital consisting of 100 000 ordinary shares of $2 each and 50 000 6% preference shares of $1 each.

During the financial year, an interim dividend of 5¢ per share is paid on the ordinary shares as well as a final dividend of 10¢ per share. An interim dividend of $1 500 is paid to the preference shareholders, with the remainder paid as a final dividend at the end of the year.

Here are the dividend calculations.

	Interim dividend	Final dividend	Total dividend
	$	$	$
Preference shares	1 500	1 500	3 000 ($50 000 × 6%)
Ordinary shares	5 000 (100 000 × 5¢)	10 000 (100 000 × 10¢)	15 000

Note:

The maximum amount of dividend that the preference shareholders can receive in this example is $3 000. The directors have decided to divide the total dividend into two payments of equal amounts. Ordinary shareholders have no maximum or minimum amount of dividend, as their dividend depends on the level of profitability.

Practice questions

1. Calculating the amount of ordinary and preference dividends

A limited company has issued share capital of:

- 300 000 ordinary shares of $2 each
- 200 000 6% preference shares of $1 each.

During the financial year ended 31 December 2018, a dividend of 5¢ per share was paid on the ordinary shares, as well as the dividend on the preference shares.

Calculate how much the company paid out as dividends during the year ended 31 December 2018.

2. Calculating the amount of ordinary and preference dividends

A limited company has authorised share capital of:

- 500 000 ordinary shares of 50¢ each
- 200 000 5% preference shares of $1 each.

The company had actually issued 80% of its ordinary shares and 50% of its preference shares.

During the year ended 31 March 2018, the company declared and paid an ordinary dividend of 2¢ per share and the preference dividend due.

Calculate the amount of dividends paid by the company during the year.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key terms

Authorised share capital: the maximum amount of share capital that a limited company is allowed to issue under its constitution.

Issued share capital: the amount of share capital that the company has actually issued, which cannot exceed the authorised amount.

The issue of shares

When a company is formed, the maximum amount of shares that can be issued is referred to as the **authorised share capital**, whereas the amount of shares actually issued is referred to as the **issued share capital**.

The amount received for the shares when they are first issued depends on the market price of the shares. The market price may be higher than the nominal (face) value of the share. The extra paid for a share above the nominal value is called the share premium. In the accounting

records of a limited company, it is important to record separately the face value of shares (sometimes called "nominal value" or "par value") from any extra value (the share premium) gained when the shares are issued.

Illustration 6

Preparing the journal entries required to record the issue of shares

A limited company has authorised share capital of 200 000 ordinary shares of $1 each and 100 000 8% preference shares of $2 each.

The company decided to issue 100 000 ordinary shares at $1.30 and 50 000 8% preference shares at $2.20. These shares are fully subscribed and paid up.

Looking first at the issue of ordinary shares:

Step 1: Work out how much money will be raised: 100 000 × $1.30 = $130 000.

Step 2: Separate out the face value of the shares from the share premium:

Face value: 100 000 shares × $1 face value = $100 000

Share premium: 100 000 shares × 30¢ premium = $30 000

Following the same procedure in the case of the issue of preference shares:

Step 1: Work out how much money will be raised: 50 000 × $2.20 = $110 000.

Step 2: Separate out the face value of the shares from the share premium:

Face value: 50 000 shares × $2 face value = $100 000

Share premium: 50 000 × shares × 20¢ premium = $10 000

The journal needed to record this issue of shares is as follows.

Journal		
	Dr	Cr
	$	$
Bank	240 000	
Issued share capital		
Ordinary shares		100 000
Preference shares		100 000
Share premium		40 000
Issue of ordinary and preference shares at a premium		

Notes:

- Share capital (always at face value) and share premium are recorded in the shareholders' equity section of the statement of financial position (balance sheet).
- The money received for the issue is recorded within the bank account in current assets.

Illustration 7

Completing the shareholders' equity section in the statement of financial position (balance sheet)

The issue of ordinary and preference shares detailed in Illustration 6 would be recorded in the shareholders' equity section of the company's statement of financial position (balance sheet) as follows.

CAPITAL AND RESERVES	$
Issued share capital:	
100 000 ordinary shares of $1 each	100 000
50 000 8% preference shares of $2 each	100 000
Share premium	40 000
Reserves	xx
Retained earnings	xx
Total equity	xx

More information on shareholders' equity and the financial statements will be provided in Unit 9.2.

Source of finance 2: Debentures

Debentures are long-term loans, usually redeemable (repayable) at a specific date and carrying a fixed rate of interest. A limited company receives money on loan and in return issues certificates called debentures to the lender. These certificates stipulate the amount of interest to be paid. Debenture interest is paid out of profits and before dividends on any type of share. The amount of interest paid is the same every year and is not optional, as it must be paid regardless of the level of profit or availability of cash.

Illustration 8

Calculating interest on debentures

A limited company has $400 000 7% debentures (2024–2026).

These debentures have a 7% rate of interest, so the total interest to be paid is: $400 000 × 0.07 = $28 000.

The debentures must be redeemed between 2024 and 2026.

Debentures are issued for cash.

Key term

Debenture: a form of loan to a company with a fixed rate of interest over a period of time. The interest is paid before any dividends are paid out to shareholders.

Tip

Usually, debentures are secured against the value of assets so that if the company defaults on an interest payment then the assets can be taken as payment instead. These are called "mortgage debentures". Debentures without such security are referred to as "simple" or "naked" debentures.

Notes:

- Debentures are recorded in the non-current liabilities section in the statement of financial position (balance sheet).
- The interest paid and payable on debentures is recorded as an expense in the income statement.
- Any interest outstanding is recorded as an accrual in the current liabilities section in the statement of financial position (balance sheet).

Illustration 9

Creating the journal entry required to record the issue of debentures

A limited company issued $300 000 8% debentures.

The journal to record this issue is as follows.

Journal		
	Dr	Cr
	$	$
Bank	300 000	
Debentures		300 000
Debentures issued for cash		

Other sources of finance

There are other sources of finance available to a limited company such as:

- bank loans: a loan at a fixed rate of interest that is paid out of profits and can be short, medium or long term
- bank overdraft: the most common type of short-term finance with a rate of interest usually higher than a bank loan – but this can work out cheaper as interest is only paid for the period for which the business is overdrawn
- mortgages: long-term loans used to finance the purchase of non-current assets. If the business defaults against the payment of interest, then the non-current asset can be repossessed.

Practice questions

3. Preparing the journal to record the issue of ordinary shares

Fox Ltd, a limited company, has authorised share capital of 200 000 ordinary shares of $1 each. The company decided to issue 100 000 ordinary shares at $1.30. These shares were fully subscribed and paid up.

Prepare the journal to record the issue of ordinary shares.

4. Preparing the journal to record the issue of preference shares and debentures

Fox Ltd also has authorised share capital of 500 000 preference shares of 20¢ each.

The company decided to issue all of the preference shares at 45¢ each, as well as to issue debentures to the value of $200 000. The issues were fully subscribed.

Prepare the journal to record the issue of preference shares and the debentures.

5. Preparing the journal entries to record the issue of shares and the payment of a dividend

S Green Ltd has authorised share capital of 100 000 ordinary shares of $1 each. The company decided to issue 50 000 ordinary shares at $1.50 each. These shares were fully subscribed and paid up. After six months, the company paid a dividend of 5¢ per share.

Prepare the journal entries to record the issue of ordinary shares and the payment of the dividend.

6. Preparing the journal entries to record the issue of debentures and the payment of a dividend

Roses in Bloom Ltd issued $200 000 6% debentures on 1 January 2017. Interest was paid for the year on 31 December 2017.

Prepare the journal entries to record the issue of the debentures and the payment of interest.

7. Preparing the equity section within a statement of financial position (balance sheet) after the issue of shares

Winston Ltd has the following equity section within its statement of financial position (balance sheet) at 31 January 2017.

	$
200 000 ordinary shares of 50¢ each	100 000
100 000 5% preference shares of $1 each	100 000
Share premium	20 000
General reserve	10 000
Retained earnings	80 000
	310 000

The directors had forgotten to record the further issue of 200 000 ordinary shares at 70¢ each which had taken place during the year. The shares had been fully subscribed and paid up.

Prepare the equity section of the statement of financial position (balance sheet) to include the share issue.

Tip

Do not confuse debenture holders with shareholders. Debenture holders are not the owners of the company and have no say in how the company is run. Debenture interest payments are a running cost of the company. It is also important to remember that debentures appear as non-current liabilities on the statement of financial position (balance sheet) and do not appear in the equity section.

8. Preparing the statement of financial position (balance sheet) extracts after the issue of shares and debentures

Damian Ltd has the following statement of financial position (balance sheet) at 31 December 2017.

Damian Ltd Statement of financial position (balance sheet) at 31 December 2017		
	$	$
Non-current assets		240 000
Current assets	65 200	
Current liabilities	41 600	
Net current assets		23 600
		263 600
Equity		
100 000 ordinary shares of $1 each		100 000
Share premium		60 000
Retained earnings		103 600
		263 600

Additional information:

- There had been a share issue of a further 200 000 ordinary shares at $1.80 each. These shares had been fully subscribed and paid up by 31 December 2017. The share issue had been omitted from the statement of financial position (balance sheet) above.
- Also omitted from the statement of financial position (balance sheet) was an issue of $100 000 debentures.

Prepare the statement of financial position (balance sheet) after recording the additional information.

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

9.2 Limited company financial statements

Objectives

By the end of this unit you will be able to:

- prepare an income statement including an appropriation account for a limited company
- prepare a limited company's statement of financial position (balance sheet)
- use the end-of-year financial statements to analyse a company's performance.

The internal end-of-year financial statements of a limited company consist of:

- an income statement
- a statement of financial position (balance sheet).

Each of these financial statements will be illustrated in this unit.

Tip

As well as producing end-of-year financial statements, limited liability companies are required to prepare a more extensive set of end-of-year financial statements that have to be filed with the Registrar of Companies. These "published accounts" must also be sent to every shareholder, and the statements must follow very specific guidelines when they are being drawn up. The published accounts consist of:

- an income statement
- a statement of changes in equity
- a statement of financial position (balance sheet) with notes providing additional detailed information
- a statement of cash flows
- a directors' report
- an auditors' report.

You will not be tested on the contents of published accounts in your examination.

The income statement

The income statement of a limited company is very similar to that of a sole trader. However, there are some expenses that are relevant only to a limited company and the profit is then either shared out to the shareholders in the form of dividends, or retained by the company for future use as **reserves**.

Key term

Reserves: profit not distributed to shareholders but set aside for future use.

Limited company expenses

There are some expenses that do not occur in any business or organization other than in a limited company, as discussed below.

Key terms

Auditors: external independent checkers of the accounting information used to prepare the financial statements.

Stewardship: the idea that managers, directors, etc. are responsible to the owners of a business for the efficient use of a business's resources.

Auditors' fees

Auditors are appointed by the directors to verify the accuracy of the records and financial statements. They are independent and are appointed to report back to the shareholders at the AGM on whether the accounts are "true and fair". Their fees are recorded as an expense in the income statement, and if unpaid and owing for that financial period are shown as a current liability in the statement of financial position (balance sheet).

Directors' remuneration

Directors are appointed by the shareholders to manage the business on their behalf. They have a **stewardship** role. Not all directors are shareholders and only a few shareholders are directors. All the monies paid to directors (such as fees, salaries, etc.) are referred to as their remuneration and are recorded as an expense in the income statement. Once again, if any remuneration is outstanding and unpaid at the year end, it is recorded in the current liabilities in the statement of financial position (balance sheet).

Debenture interest

Debentures are loans that bear a fixed rate of interest. This interest is an expense and should be recorded in the income statement. Again, if all or part of the interest remains unpaid it should be recorded as an accrual in the current liabilities section of the statement of financial position (balance sheet). The debentures are recorded as a non-current liability.

There are several layouts of the income statement that are appropriate for internal use, one of which is now illustrated.

Illustration 10

Preparing an income statement for a limited company

Nearly There Ltd has been trading for several years, selling maps for tourists.

Nearly There Ltd has an authorised share capital of 100 000 ordinary shares of $1 each and 50 000 8% preference shares of $2 each. The company has issued 5 000 preference shares at par and 50 000 ordinary shares have been issued at a premium of 28¢.

An audit has been carried out by the external independent auditors and a trial balance at 31 December 2018 has been produced as follows.

Trial balance at 31 December 2018		
	$000	$000
10% Debentures 2015–2020		20 000
Accounts payable		22 100
Accounts receivable	16 800	
Administration expenses	1 700	
Auditors' fees	2 400	
Cash at bank		2 700
Cost of sales	84 500	
Debenture interest	100	
Depreciation charge for the year on premises	2 900	
Depreciation charge for the year on vehicles	4 000	
Directors' remuneration	42 100	
Dividends paid: ordinary shares	2 600	
Dividends paid: preference shares	400	
General reserve		15 000
Inventory at 31 December 2017	12 500	
Issued share capital: ordinary shares of $1 each		50 000
Issued share capital: 8% preference shares of $2 each		10 000
Premises at cost	153 000	
Profit and loss balance at 1 January 2018		13 500
Provision for depreciation on premises		12 000
Provision for depreciation on vehicles		16 000
Rental income		1 500
Revenue		192 000
Selling and distribution costs	1 200	
Share premium		14 000
Vehicles at cost	32 000	
Wages and salaries	12 600	
	368 800	368 800

Additional information (in $000):

- At 31 December 2018, debenture interest accrued was $1 900.
- Inventory at 1 January 2018 was $11 500.
- The directors proposed to pay a dividend of $3 000 to the ordinary shareholders and to pay the preference shareholders their outstanding dividend. The directors also proposed to transfer $5 000 to the general reserve.

Note:

- The expenses include directors' remuneration, auditors' fees and debenture interest.

Here is the income statement.

Nearly There Ltd Income statement for the year ended 31 December 2018		
	$000	$000
Revenue		192 000
Cost of sales		84 500
Gross profit		107 500
Other income: rental income		1 500
		109 000
Less expenses:		
Wages and salaries	12 600	
Administration expenses	1 700	
Selling and distribution costs	1 200	
Directors' remuneration	42 100	
Auditors' fees	2 400	
Depreciation	6 900	
Debenture interest	2 000	
		68 900
Net profit		40 100

The appropriation account

Once the net profit for the year has been calculated in the income statement, the appropriation account is prepared to show how the net profit is distributed and to whom.

Illustration 11

Preparing a company's appropriation account

The appropriation account for the company in Illustration 10 is as follows.

Nearly There Ltd Appropriation account for the year ended 31 December 2018		
	$000	$000
Profit for the year		40 100
Less transfers to reserves	5 000	
Less dividends paid and proposed		
Ordinary shares:		
paid	2 600	
proposed	3 000	
Preference shares:		
paid	400	
proposed	400	
		11 400
Retained profit for the year		28 700
Retained profit b/f		13 500
Retained profit c/f		42 200

Notes:

- Start the appropriation account by bringing forward the profit from the income statement.
- Then deduct every distribution of profits agreed by the company's directors, including transfers to any reserves and dividends (both paid and proposed).
- Finally, add on the opening balance of retained profit – this is sometimes described as the balance of the statement of profit and loss at the beginning of the year. This will give the closing balance of retained profit (or closing balance of the income statement) that will be needed for the closing statement of financial position (balance sheet).

Practice questions

9. Distinguishing between a sole trader, partnership or company

Complete the table, identifying whether the expenditure is relevant to a sole trader, partnership or company. (There will be only one choice in each case.) Use a tick to indicate your choices.

	Sole trader	Partnership	Company
Directors' fees			
Auditors' fees			
Interest on drawings			
Debenture interest			

10. Distinguishing between a sole trader, partnership or company

Complete the table, identifying whether the expenditure is relevant to a sole trader, partnership or company. (There could be more than one choice in each case.) Use a tick to indicate your choices.

	Sole trader	Partnership	Company
Salaries and wages			
Dividends paid			
Drawings			
Interest on capital			
Goods taken for the owners' own use			

Tip

It is important to remember that debenture holders are not the owners of the limited company and, therefore, the interest payable is treated as an expense. A common error is to treat debenture holders as shareholders and to forget to record debenture interest as an expense.

11. Preparing an income statement and appropriation account for a limited company

The following is an extract from the trial balance of Dante Ltd at 31 December 2018.

Trial balance (extract) at 31 December 2018		
	Dr	Cr
	$000	$000
Administration expenses	1100	
Auditors' fees	2200	
Cost of sales	44500	
Debenture interest	100	
Directors' remuneration	2600	
Dividends paid: ordinary shares	2200	
Dividends paid: preference shares	800	
Premises:		
Cost	54000	
Provision for depreciation		27000
Rental income		500
Retained earnings at 1 January 2018		6400
Revenue		92000
Selling and distribution costs	1400	
Vehicles:		
Cost	2000	
Provision for depreciation		1600
Wages and salaries	2600	

Additional information (in $000):

- Premises should be depreciated by $540 and vehicles by $200.
- A dividend was proposed on ordinary shares of $2200 and on preference shares of $800.
- The directors proposed to transfer $2000 to a general reserve.

Prepare an income statement and appropriation account for Dante Ltd for the year ended 31 December 2018.

12. Preparing an income statement and appropriation account for a limited company

The following is an extract from the trial balance of Diplock Ltd at 31 March 2018.

Trial balance (extract) at 31 March 2018		
	Dr	Cr
	$	$
Administration expenses	44 000	
Auditors' fees	12 500	
Debenture interest	6 100	
Directors' remuneration	32 000	
Dividends paid	20 000	
Dividends received		14 000
Inventory at 1 April 2017	32 600	
Machinery:		
Cost	42 000	
Provision for depreciation		17 200
Premises:		
Cost	550 000	
Provision for depreciation		55 000
Purchases	214 000	
Rental income		4 500
Retained earnings at 1 April 2017		32 000
Revenue		482 000
Selling and distribution costs	41 800	
Wages and salaries	82 600	

Additional information:

- Inventory at 31 March 2018 was $31 400.
- At 31 March 2018, accrued directors' fees amounted to $4 000.
- The premises are to be depreciated by 2% on cost each year.
- The machinery is depreciated by 10% per year using the reducing-balance method.
- The directors proposed to make a dividend payment of $8 200.

Prepare an income statement and appropriation account for Diplock Ltd for the year ended 31 March 2018.

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

The statement of financial position (balance sheet)

The statement of financial position (balance sheet) of a limited company is very similar to that of a sole trader in layout, except that the simple capital section (opening capital + profit – drawings) is replaced with an equity section that includes details of shares and reserves.

Illustration 12

Preparing the statement of financial position (balance sheet) of a limited company

Here is the statement of financial position (balance sheet) for Nearly There Ltd at 31 December 2018.

Nearly There Ltd
Statement of financial position (balance sheet) at 31 December 2018

	$ Cost	$ Total deprcn	$ Net
NON-CURRENT ASSETS			
Premises	153 000	12 000	141 000
Vehicles	32 000	16 000	16 000
	185 000	28 000	157 000
CURRENT ASSETS			
Inventory	12 500		
Accounts receivable	16 800		
		29 300	
CURRENT LIABILITIES			
Accounts payable	22 100		
Debenture interest payable	1 900		
Dividends proposed	3 400		
Bank overdraft	2 700		
		30 100	
Net current liabilities			800
			156 200
NON-CURRENT LIABILITIES			
Debentures			20 000
Net assets			136 200
EQUITY			
Authorised share capital:			
100 000 ordinary shares of $1 each			100 000
50 000 8% preference shares of $2 each			100 000
Issued share capital:			
50 000 ordinary shares of $1 each			50 000
5 000 8% preference shares of $2 each			10 000
Share premium			14 000
General reserve			20 000
Retained earnings			42 200
Total equity			136 200

Notes:

- The statement of financial position (balance sheet) has been prepared using the new section "equity" instead of capital.
- The authorised share capital is stated on the statement of financial position (balance sheet) for information purposes only and is not included within the total equity amount.
- A company statement of financial position (balance sheet) can include liabilities that a sole trader would not have: debenture interest payable, directors' and/or auditors' remuneration due but unpaid and proposed dividends.
- The general reserve is a made up of retained profits taken from the income statement in previous years. In this case, the figure of $20 000 was calculated from the figure shown on the trial balance ($15 000) plus this year's transfer of $5 000 recorded in the appropriation account.
- The equity section includes the shares and reserves. Ordinary shares should be shown before preference shares. Retained earnings (sometimes called the statement profit and loss balance) is the last figure shown in the appropriation account.
- The correct order for reserves is: share premium, general reserve, profit and loss balance.
- The share premium was calculated as follows: 50 000 shares × 28¢ = $14 000.
- The current liabilities exceed the current assets so the subtotal has been labelled "Net current liabilities".

Tip

One of the most common mistakes when preparing a limited company's statement of financial position (balance sheet) is to forget to record the proposed dividends as a current liability.

Revenue and capital reserves

Reserves are profits made by the company that have not been distributed to shareholders. In Illustration 12, Nearly There Ltd has reserves totalling $76 200 (in other words, the total of share premium, general reserve and profit and loss account balance).

Reserves are of two kinds. There are **capital reserves**, which are created as a result of non-trading activities. In the case of Nearly There Ltd, the one example of a capital reserve is the share premium of $14 000. Another example would be a revaluation reserve, which arises when non-current assets (typically property) are revalued at a higher value than their current net book value. Capital reserves may not be used to finance a dividend payment to shareholders.

Key term

Capital reserves: profits that arise from non-trading activities; they may not be used to finance the payment of dividends to shareholders.

Key term

Revenue reserves: profits that arise from trading activities; directors may use these reserves to finance the payment of dividends to shareholders.

The other type of reserve is a **revenue reserve**. These arise from the ordinary trading activities of the company. In the case of Nearly There Ltd, there are two revenue reserves: the general reserve of $20 000 and the retained earnings of $42 200. Another possible revenue reserve could be one created in order to help finance the replacement of non-current assets, often called an "assets replacement reserve". Revenue reserves can be used to finance dividend payments to shareholders. However, revenue reserves are normally deliberately created by the directors of a company to strengthen the position of the company by withholding dividend payments.

Practice questions

13. Preparing a statement of financial position (balance sheet) for a limited company

The following is an extract from the trial balance of Ramteet Ltd at 31 December 2018 after the preparation of the income statement and appropriation account for the year ended on that date.

Trial balance (extract) at 31 December 2018		
	$	$
10% Debentures 2020–2022		30 000
Accounts payable		32 100
Accounts receivable	36 900	
Bank overdraft		18 100
Expenses prepaid	8 200	
Fixtures and fittings net book value	82 000	
General reserve		40 000
Inventory at 31 December 2018	44 900	
Issued share capital:		
8% preference shares of $2 each		160 000
ordinary shares of $1 each		200 000
Premises net book value	410 000	
Proposed dividends		13 000
Rental income owing	2 100	
Retained earnings at 31 December 2018		50 900
Share premium		40 000
	584 100	584 100

Prepare the statement of financial position (balance sheet) for Ramteet Ltd at 31 December 2018.

14. Preparing a statement of financial position (balance sheet) for a limited company

The following is the trial balance of Bendon Ltd at 31 October 2018.

Trial balance at 31 October 2018		
	$	$
10% Debentures 2012–2022		50 000
Accounts payable		42 400
Accounts receivable	56 900	
Auditors' fees owing		15 000
Cash at bank	15 300	
Expenses prepaid	5 200	
Fixtures and fittings: cost	50 000	
Provision for depreciation		10 000
General reserve		20 000
Inventory at 31 October 2018	38 100	
Issued share capital: ordinary shares of $1 each		100 000
Premises: cost	160 000	
Provision for depreciation		40 000
Proposed dividends		5 000
Retained earnings at 31 October 2018		41 100
Share premium		30 000
Vehicles: cost	36 000	
Provision for depreciation		8 000
	361 500	361 500

Prepare the statement of financial position (balance sheet) of Bendon Ltd at 31 October 2018.

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Analysing the performance of a limited company

As you know from your study in Chapter 5, ratio analysis is used to interpret the information contained within financial statements in order to assess the strengths and the weaknesses of a business, including limited companies.

These ratios are used:

- to compare results from year to year to establish the individual company's trends
- to compare one year's results to those of other companies within the same industry using the industry average ratios to evaluate the individual company's performance
- to evaluate the company's performance and provide information for interested stakeholders.

The table below shows the stakeholders in a limited company.

Stakeholder	Reason for interest
Managers or directors	To evaluate company performance for future decision-making, such as setting budgets for future activities and identifying areas requiring improvement
Bank manager or other lenders	To assess whether to give finance to the company and whether the loans can be paid back with interest
Accounts payable (suppliers)	To assess the likelihood of receiving payment for supplies
Customers	To be assured that the company will continue to provide supplies or services
Shareholders	To assess whether to continue as a shareholder, buy more shares or sell their current shareholding. Also to assess the level of return and the security of their investment
Potential investors	To compare one company's performance with that of another company's to identify the best investment
Employees and trade unions	To check on the financial prospects of the company for job security, pay rises and wage negotiations, bonuses, training and working conditions
Government bodies	To check the amounts due for taxation liabilities and to provide data for statistical analysis of the performance of the economy
Local community	To be assured that the company will continue to provide employment for the local area and to support the local economy

As you know, ratios can be divided into three categories. Here is a reminder of these three categories:

- profitability ratios, assessing how much profit is made by the business during the current year
- liquidity ratios, assessing the availability of liquid funds in the short term
- efficiency ratios, assessing how efficiently the business has used its available resources.

To demonstrate how to use ratios to analyse a limited company's performance, the following illustrations include a reminder of how ratios are calculated, and how they should be applied to the accounts of Nearly There Ltd as set out in Illustrations 10 to 12.

Illustration 13

Using profitability ratios

Using the information provided for Nearly There Ltd, the profitability ratios are as follows.

Net profit percentage $= \frac{40\,100}{192\,000} \times 100 = 20.89\%$

From each $1 of sales, 20.89¢ is net profit.

Gross profit percentage $= \frac{107\,500}{192\,000} \times 100 = 55.99\%$

From each $1 of sales, 55.99¢ is gross profit.

Return on investment $= \frac{40\,100}{136\,000} \times 100 = 29.44\%$

For every $1 invested in the business, 29.44¢ profit is made.

Illustration 14

Using liquidity ratios

Using the information provided for Nearly There Ltd, the liquidity ratios are as follows.

Current ratio = \$29 300 : \$30 100 = 0.97:1

For every \$1 that is owed in short-term debt, there is 97¢ of current assets.

Acid test ratio = (\$29 300 – \$12 500) : \$30 100 = 0.56 : 1

For every \$1 that is owed in short-term debt, there is only 56¢ of liquid assets.

Illustration 15

Using efficiency ratios

Using the information provided for Nearly There Ltd, the rate of inventory turnover is calculated as follows.

Step 1: Average inventory = $\frac{\$11\,500 + \$12\,500}{2} = \$12\,000$

Step 2: **Rate of inventory turnover** = $\frac{84\,500}{12\,000} = 7.04$ times

The average inventory has been sold 7.04 times during the year.

Practice questions

15. Analysing the financial results of a limited company

The financial statements for Over and Out Ltd for the year ended 31 December 2018 were as follows.

Over and Out Ltd Income statement for the year ended 31 December 2018	
	\$
Revenue	180 000
Cost of sales	71 500
Gross profit	108 500
Other income: rental income	1 500
	110 000
Expenses	50 000
Profit for the year	60 000

Appropriation account for the year ended 31 December 2018	
	$
Profit for the year	60 000
Dividends paid	12 000
	48 000
Add retained earnings at 1 January 2018	42 000
Retained earnings at 31 December 2018	90 000

Statement of financial position (balance sheet) at 31 December 2018			
	$	$	$
NON-CURRENT ASSETS	Cost	Total depreciation	Net
Premises	180 000	12 000	168 000
Vehicles	55 000	16 000	39 000
	235 000	28 000	207 000
CURRENT ASSETS			
Inventory	30 200		
Accounts receivable	22 800		
Cash at bank	6 300		
		59 300	
CURRENT LIABILITIES			
Accounts payable	28 400		
Debenture interest payable	2 900		
		31 300	
Net current assets			28 000
			235 000
NON-CURRENT LIABILITIES			
Debentures			20 000
Net assets			215 000
EQUITY			
Authorised share capital:			
200 000 ordinary shares of $1 each			200 000
Issued share capital:			
100 000 ordinary shares of $1 each			100 000
Share premium			10 000
General reserve			15 000
Retained earnings			90 000
Total equity			215 000

Use the financial statements for Over and Out Ltd to calculate the following profitability and financial ratios:

a. gross profit percentage
b. net profit percentage
c. return on investment
d. current ratio
e. acid test ratio
f. inventory turnover (using the closing inventory as the average inventory).
g. Explain briefly what each of the ratios tells you about the financial results of Over and Out Ltd for the year ended 31 December 2018.

16. Analysing the financial results of a limited company

The financial statements for Halls Ltd for the year ended 31 May 2018 were as follows.

Halls Ltd Income statement for the year ended 31 May 2018	
	$
Revenue	380 000
Cost of sales	122 500
Gross profit	257 500
Other income: rental income	12 500
	270 000
Expenses	198 000
Profit for the year	72 000

Appropriation Account for the year ended 31 May 2018	
	$
Profit for the year	72 000
Less dividends proposed	30 000
	42 000
Add retained earnings at 1 June 2017	168 000
Retained earnings at 31 May 2018	210 000

Statement of financial position (balance sheet) at 31 December 2018			
	$	$	$
NON-CURRENT ASSETS	Cost	Total depreciation	Net
Premises	450 000	42 000	408 000
Fixtures and fittings	90 000	26 000	64 000
Vehicles	60 000	20 000	40 000
	600 000	88 000	512 000
CURRENT ASSETS			
Inventory	38 200		
Accounts receivable	22 300		
		60 500	
CURRENT LIABILITIES			
Accounts payable	30 100		
Debenture interest payable	2 900		
Proposed dividends	30 000		
Bank overdraft	19 500		
		82 500	
Net current liabilities			22 000
			490 000
NON-CURRENT LIABILITIES			
Debentures			40 000
Net assets			450 000
EQUITY			
Authorised share capital			
400 000 ordinary shares of $0.50 each			200 000
100 000 8% preference shares of $2 each			200 000
Issued share capital			
200 000 ordinary shares of $0.50 each			100 000
50 000 8% preference shares of $2 each			100 000
Share premium			40 000
Retained earnings			210 000
Total equity			450 000

Use the financial statements for Halls Ltd to calculate the following profitability and financial ratios:

a. gross profit percentage
b. net profit percentage
c. return on investment
d. current ratio
e. acid test ratio

f. inventory turnover (using the closing inventory as the average inventory).

g. Explain briefly what each of the ratios tells you about the financial results of Halls Ltd for the year ended 31 May 2018.

17. Analysing the financial results of a limited company

Grand Gardening Ltd is a successful gardening design company that has been operating for many years.

The ratios for Grand Gardening Ltd and the averages for the industry for the year ended 31 January 2018 were as follows.

	Grand Gardening Ltd	Industry averages
Gross profit percentage	65%	82%
Net profit percentage	20%	42%
Current ratio	3.1 : 1	2.2 : 1
Acid test ratio	2.3 : 1	1.2 : 1
Inventory turnover	32 days	24 days
Return on investment	18%	35%

Comment on the results of Grand Gardening Ltd by comparing their ratios with the industry averages.

18. Analysing the financial results of a limited company

The financial statements for Lucky Ltd for the year ended 31 December 2018 were as follows.

Lucky Ltd Income statement for the year ended 31 December 2018	
	$
Revenue	289 500
Cost of sales	88 000
Gross profit	201 500
Other income – Commission received	10 500
	212 000
Expenses	152 000
Profit for the year	60 000

Appropriation account for the year ended 31 December 2018	
	$
Profit for the year	60 000
Dividends paid and proposed	60 000
	0
Retained earnings at 1 January 2018	140 000
Retained earnings at 31 December 2018	140 000

Statement of financial position (balance sheet) at 31 December 2018			
	$	$	$
NON-CURRENT ASSETS	Cost	Total deprcn	Net
Premises	580 000	120 000	460 000
Delivery vehicles	80 000	42 000	38 000
	660 000	162 000	498 000
CURRENT ASSETS			
Inventory	60 000		
Accounts receivable	44 800		
Cash at bank	15 200		
		120 000	
CURRENT LIABILITIES			
Accounts payable	32 000		
Dividends payable	60 000		
Debenture interest payable	4 000		
		96 000	
Net current assets			24 000
			522 000
NON-CURRENT LIABILITIES			
Debentures			120 000
Net assets			402 000
EQUITY			
Authorised share capital			
300 000 ordinary shares of $1 each			300 000
Issued share capital			
200 000 ordinary shares of $1 each			200 000
Share premium			22 000
General reserve			40 000
Retained earnings			140 000
Total equity			402 000

The ratio results for last year for Lucky Ltd are shown in the table.

Gross profit percentage	65%
Net profit percentage	10%
Current ratio	2.1 : 1
Acid test ratio	1.2 : 1
Return on investment	8%

Calculate the following ratios for Lucky Ltd for the current year:

a. gross profit percentage
b. net profit percentage
c. current ratio
d. acid test ratio
e. return on investment
f. Comment on the results and state whether the performance of Lucky Ltd has improved.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

9.3 Accounting for co-operatives

Objectives

By the end of this unit you will be able to:

- explain the main features and principles of a co-operative society
- identify the different types of co-operative
- prepare financial statements of a co-operative society.

Key term

Co-operative society: a non-profit organization that is owned and controlled by its members, who are also its main customers.

What is a co-operative society?

A **co-operative society** (often just known as a "co-operative") is a legal business entity formed not for profit, but for the benefit of its members and that of wider society by providing them with goods and services. It is owned and controlled by its members, who also provide the main source of income as they are the co-operative's main customers. The members are therefore both the owners and the users of the services provided by the co-operative. For example, some of the residents of a village form a co-operative and buy the local village shop, which they run selling produce to the co-operative members and to the other local residents. To become a member of a co-operative, a person must buy a share in the business.

Principles of co-operatives

- *Open membership*: there is no restriction to membership based on social, political, racial or religious grounds.
- *Democratic control*: each member has an equal say in the operations of the co-operative regardless of the number of shares he or she has.
- *Limited interest on capital*: as the main focus of the co-operative is to provide services to its members, any dividend on the shares should be modest.
- *Patronage refund*: any return distributed to the members should be carried out fairly after a compulsory transfer to a statutory reserve fund.
- *Continuous education*: all members are entitled to be educated in the general operations of the co-operative.
- *Co-operation among co-operatives*: co-operatives best serve the interests of their members if they work with other co-operatives on a local, national and international basis.

Types of co-operative

There are two main types of co-operatives: service co-operatives and worker co-operatives.

Service co-operatives

The members of a **service co-operative** trade with the co-operative, that is, buy from it and sell to it. Examples include:

- suppliers co-operatives trading in necessities such as raw materials
- thrift or credit co-operatives providing their members with savings and favourable loan facilities, as well as credit unions that also offer financial services
- transport and tillage co-operatives providing transport to market or equipment such as a tractor
- consumer co-operatives such as wholesale distributors and retail outlets
- housing co-operatives providing housing solutions for their members
- insurance co-operatives providing a range of insurance protection
- marketing co-operatives providing marketing advice and services.

Production or worker co-operatives

The members of a **production or worker co-operative** not only trade with the co-operative but are also employed by it. Examples include:

- agricultural co-operatives for farming
- communal production co-operatives providing communal living and production
- entertainment service co-operatives that aim to provide a single bargaining agency
- junior co-operatives providing support to students
- transport service co-operatives that aim to provide transport for the general public.

Key terms

Service co-operative: its members trade with the co-operative.

Production or worker co-operative: its members are employed by, as well as trade with, the co-operative.

Raising finance

The primary source of capital for a co-operative is from its members purchasing goods and services from the society.

Other ways of raising finance include:

- the sale of shares to members, which may or may not include a registration fee
- grants
- donations
- membership fees (known as affiliation fees)
- interest on members' deposits.

Illustration 16

Journal entries to record capital

A large community of farmers decided to form a marketing co-operative called North Enterprise Co-operative to provide marketing advice and services to its members. There were to be 16 000 members and each member was to pay $100 per share.

Note:

- A co-operative keeps a receipts and payments account rather than a cash account, as it is a non-profit organization. (There is more about receipts and payments accounts in Unit 9.4.)

The opening journal in the books of North Enterprise Co-operative was as follows.

General journal		
	Dr $	Cr $
Receipts and payments account	1 600 000	
Share capital account		1 600 000
Funds raised by the issue of 16 000 shares at $100 each		

Practice questions

19. Preparing the opening journal entry for a co-operative

A group of farmers decided to form a co-operative called the Southern Farming Markets Co-operative to provide marketing advice and services to its members. There were to be 8 000 members and each member was to pay $50 per share.

a. Prepare the opening journal entry to record the above transaction.
b. Identify what kind of co-operative this is.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

20. Preparing the opening journal entry for a co-operative

The City Builders co-operative has recently been formed with a membership of 50 builders. Each member has 14 000 shares and the price per share is $1.

a. Prepare the opening journal entry to record the above transaction.
b. Identify what kind of co-operative this is.

End-of-year financial statements

A co-operative is a mix of a non-profit organization, as its primary purpose is to fulfill the needs of its members not to make a profit, and a limited company, as its members have bought shares in the business and receive a share of any profit (referred to as a surplus of income over expenditure) in the form of dividends.

The financial statements prepared for a co-operative therefore reflect this mixture. Co-operatives produce an income and expenditure account that is similar to an income statement; and, like a limited company, a trading account is used for some of the activities. As all co-operatives are owned by a number of persons, they must also

produce an appropriation account and statement of financial position (balance sheet). However, unlike a limited company, there is no limit on the number of shares a co-operative can issue.

Illustration 17

Preparing an income and expenditure account

The following information is available for North Enterprise Co-operative for the year ended 31 December 2018.

Trial balance at 31 December 2018		
	Dr $	Cr $
Accounts payable		62 000
Annual general meeting costs	35 000	
Auditors' remuneration	24 000	
Bank charges and interest	41 000	
Cash at bank	288 000	
Dividends paid	16 000	
Equipment: cost	480 000	
Equipment: provision for depreciation		50 000
Interest received		18 000
Leasehold premises: cost	1 000 000	
Membership fees		467 000
Motor vehicle running costs	66 000	
Motor vehicles: cost	270 000	
Motor vehicles: provision for depreciation		40 000
Office expenses	127 000	
Share capital		1 600 000
Statutory reserve		20 000
Undistributed surplus at 1 January 2018		90 000
	2 347 000	2 347 000

Additional information:

- Membership fees due at 31 December 2018 were $14 000.
- Office expenses paid in advance at 31 December 2018 were $26 000.
- Motor vehicle costs owing at 31 December 2018 were $18 000.
- Depreciation is to be charged as follows:
  - equipment at 10% per annum using the straight-line method
  - motor vehicles at 20% per annum using the reducing-balance method.

Key terms

Statutory reserve: to meet a legal requirement, a fixed percentage of any net surplus of income over expenditure is transferred to this reserve.

Honorarium: a voluntary payment to the members of the management committee as a token of appreciation for services performed.

- The board of management has decided to transfer 20% of the surplus for the year to the **statutory reserve**.
- An **honorarium** of $10 000 is to be paid to the board of management.

Here is the income and expenditure account based on this information.

North Enterprise Co-operative
Income and expenditure account for the year ended 31 December 2018

	Workings $	$	$
INCOME			
Membership fees	(467 000 + 14 000)		481 000
Interest received			18 000
			499 000
EXPENDITURE			
Office expenses	(127 000 – 26 000)	101 000	
Motor vehicle costs	(66 000 + 18 000)	84 000	
Bank charges and interest		41 000	
Annual general meeting costs		35 000	
Auditors' remuneration		24 000	
Depreciation on equipment	(480 000 × 0.1)	48 000	
Depreciation on motor vehicles	(270 000 – 40 000) × 0.2)	46 000	
			379 000
Surplus for the year			120 000

Notes:

- This co-operative does not hold inventory or trade, so there is no trading account.
- Any excess of income over expenditure is called a surplus and any excess of expenditure over income is called a deficit.
- Adjustments are made for prepayments, accruals, depreciation, etc.
- The honorarium is a voluntary payment to management of the co-operative as an appreciation of services performed and is treated as an appropriation of profit and not as an expense.

Practice questions

21. Preparing an income and expenditure account

The following information is available for the East Training Co-operative for the year ended 31 March 2018.

Trial balance at 31 March 2018		
	Dr $	Cr $
Accounts payable		6200
Annual general meeting costs	2500	
Auditors' remuneration	1400	
Bank charges and interest	400	
Cash at bank	2800	
Depreciation	1600	
Equipment:		
Cost	44000	
Provision for depreciation		10000
Interest received		100
Leasehold premises: cost	240000	
Membership fees		54600
Motor vehicle running costs	6600	
Motor vehicles:		
Cost	28000	
Provision for depreciation		4000
Office expenses	27400	
Share capital		200000
Statutory reserve		45000
Undistributed surplus at 1 April 2017		34800
	354700	354700

a. Prepare the income and expenditure account for the year ended 31 March 2018.

b. Explain what a statutory reserve is.

22. Preparing an income and expenditure account

The following information is available for the Teachers' Credit Union Co-operative for the year ended 31 December 2018.

Trial balance at 31 December 2018		
	Dr	Cr
	$	$
Accounts payable		6200
Cash at bank	22800	
Computer equipment:		
Cost	18000	
Provision for depreciation		4500
Dividends paid	6000	
Freehold premises: cost	240000	
Furniture and fittings:		
Cost	44000	
Provision for depreciation		11000
Honorarium paid to retiring secretary	4400	
Interest paid and received	200	2400
Investments	70000	
Loans to members	45000	
Membership fees		14600
Mortgage on premises		110000
Office expenses	7600	
Share capital		250000
Statutory reserve		15000
Undistributed surplus at 1 January 2018		44300
	458000	458000

Additional information:

- Depreciation is charged on furniture and fittings at 25% using the reducing-balance method and at 25% on computer equipment using the straight-line method.
- There are accrued office expenses of $400 at 31 December 2018.
- There are outstanding membership fees of $2000 at 31 December 2018.

Prepare an income and expenditure account for the year ended 31 December 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Appropriation account

An appropriation account is used within the final accounts of a co-operative to share the profits out among the members.

Illustration 18

Preparing an appropriation account

The appropriation account of North Enterprise Co-operative is as follows.

North Enterprise Co-operative
Appropriation account for the year ended 31 December 2018

	Workings $	$	$
Surplus for the year			120 000
Transfer to statutory reserve	(0.2 × 120 000)		24 000
			96 000
Less honoraria		10 000	
Dividend		16 000	
			26 000
Undistributed surplus for the year			70 000
Add undistributed surplus b/f			90 000
Undistributed surplus c/f to next year			160 000

Notes:

- It is a legal requirement that a percentage of any net surplus for the year should be transferred to a statutory reserve. The co-operative can also make voluntary transfers to reserves for specific purposes, for example an education fund.
- Any undistributed surplus carried forward is added to capital and reserves in the statement of financial position (balance sheet).

Practice questions

23. Preparing the appropriation account

The Fins Coast Fishermen's Co-operative has a share capital of 100 000 $1 shares.

The management committee has decided that the surplus for the year ended 31 December 2018 should be shared in the following manner:

- 15% to be transferred to a statutory reserve account.
- 10% to be transferred to a scholarship fund for the fishermen's children.

Dividends paid during the year were 15¢ per share.

Other information:

	$
Honoraria	12 000
Undistributed surplus at 1 January 2018	112 000
Surplus for the year	96 000

Prepare the appropriation account for the year ended 31 December 2018.

24. Preparing the appropriation account

The Village Store Co-operative has 200 members. Each member has 10 000 shares at a price of $1 each.

The management committee has decided that, at 31 January 2018, 10% of the surplus for the year should be transferred to a statutory reserve account.

Dividends of 2¢ per share were paid during the year.
Additional information:

	$
Honoraria	8 000
Undistributed surplus at 1 February 2017	19 200
Surplus for the year	56 000

Prepare the appropriation account for the year ended 31 January 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Statement of financial position (balance sheet)

Illustration 19

Preparing a statement of financial position (balance sheet) of a co-operative

The statement of financial position (balance sheet) of a co-operative is similar to that of a limited company. The statement of financial position (balance sheet) of North Enterprise Co-operative is therefore as follows.

North Enterprise Co-operative
Statement of financial position (balance sheet) at 31 December 2018

	$	$	$
NON-CURRENT ASSETS	Cost	Total deprcn	Net
Leasehold premises	1 000 000	–	1 000 000
Equipment	480 000	98 000	382 000
Motor vehicles	270 000	86 000	184 000
	1 750 000	184 000	1 566 000
CURRENT ASSETS			
Accounts receivable:			
Membership fees due	14 000		
Prepayments	26 000		
Cash at bank	288 000		
		328 000	
CURRENT LIABILITIES			
Accounts payable	62 000		
Accruals	18 000		
Honoraria	10 000		
		90 000	
Net current assets			238 000
			1 804 000

CAPITAL AND RESERVES			
Share capital			1 600 000
Statutory reserve			44 000
Undistributed surplus			160 000
			1 804 000

Practice questions

25. Preparing the statement of financial position (balance sheet) for a co-operative

The following information is available for the Pathways Environmental Co-operative for the year ended 31 March 2018.

Trial balance at 31 March 2018		
	Dr $	Cr $
Accounts payable		36 200
Accounts receivable	24 000	
Cash at bank	4 800	
Dividends paid	10 000	
Equipment at net book value	33 000	
Expenses paid in advance	1 900	
Loan interest owing		600
Long-term loan		12 000
Share capital		100 000
Statutory reserve		15 000
Surplus for year		54 600
Undistributed surplus at 1 April 2017		5 300
Woodland at net book value	150 000	
	223 700	223 700

Additional information:

- 20% of the surplus for the year is to be transferred to the statutory reserve.
- An honorarium of $5 000 is to be paid at the end of the year.

Prepare the statement of financial position (balance sheet) at 31 March 2018.

26. Preparing a statement of financial position (balance sheet) for a co-operative

The following information is available for the Goat Farmers' Co-operative for the year ended 31 October 2018.

Trial Balance at 31 October 2018		
	Dr	Cr
	$	$
Accounts payable		22 200
Accounts receivable	14 000	
Cash at bank		4 200
Dividends paid	40 000	
Education statutory reserve		44 000
Equipment at net book value	36 000	
Expenses paid in advance	3 900	
Farmland at net book value	320 000	
Loan interest owing		2 000
Long-term loan		20 000
Share capital (shares of 50¢ each)		200 000
Surplus for year		85 600
Undistributed surplus at 1 November 2017		35 900
	413 900	413 900

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Additional information:

- 10% of the surplus for the year is to be transferred to the education statutory reserve.
- An honorarium of $12 000 is to be paid at the end of the year.

a. Prepare the statement of financial position (balance sheet) at 31 October 2018.

b. Calculate the amount of dividend paid per share.

9.4 Accounting for non-profit organizations

Objectives

By the end of this unit you will be able to:

- explain the main features and principles of a non-profit organization
- define some key terms which are specific to non-profit organizations
- prepare a receipts and payments account.

What is a non-profit organization?

Most business organizations have the same objective and that is to maximise profit. However, **non-profit organizations**, such as clubs and societies, are there to provide a service. For example, a cricket club is run so that its members have somewhere to meet and play cricket, and a charity is there to provide relief to those in need. Neither of these organizations' main objective is to trade or to make profit. The financial statements produced by these organizations are therefore different to those produced for trading organizations. For example, as they do not trade to make a profit, they have no need of an income statement.

Key term

Non-profit organization: an organization whose main objective is not to make a profit but to provide a service for members.

Illustration 20

Some examples of profit-making and non-profit organizations

The following table gives examples of organizations whose objective is either profit maximization or to provide a service.

	Profit maximization	Providing a service
Bakery	✓	
Taxi driver	✓	
Local conservation society		✓
Local hockey club		✓
Scout group		✓
Dentist surgery	✓	
Sports and social club		✓

Note:

- A non-profit organization may have a section that hopes to make a profit, but the main aim of the organization as a whole is to provide a service. For example, a sports and social club may have a bar that sells refreshments at a profit. However, the aim of the club is to provide social and sporting events to its members without making an overall profit.

The receipts and payments account

As non-profit organizations do not trade for a profit, many operate on a cash basis. Their only written financial record is a cash book. The first and most simple financial statement is therefore a **receipts and payments account**, which is a summary of this cash book for a period of time. For cash-based organizations that bank all their cash receipts, the receipts and payments account is in fact another name for the cash account.

Key terms

Receipts and payments account: an account used by non-profit organizations to record a summary of cash receipts and payments.

Treasurer: a person appointed to look after the financial records of a non-profit organization.

The receipts and payments account records all the income for a period and all the expenditure, whether it is revenue or capital expenditure. As you know, revenue expenditure is expenditure on the day-to-day running costs of an organization, whereas capital expenditure is expenditure on non-current assets such as purchasing a non-current asset (see Unit 6.5).

Typical receipts for a non-profit organization include:

- subscriptions received from members (usually the main source of finance)
- amounts received in connection with events designed to provide some extra finance for the organization (e.g.. sales of refreshments, ticket sales for special events)
- donations from members (i.e., cash gifts)
- amounts received from the disposal of unwanted non-current assets (e.g. from the sale of tennis equipment in a sports club)
- loans from members (that will be repaid at some future date).

Typical payments for a non-profit organization include:

- expenses
- purchases of inventory for sale in a club's café
- additional non-current assets
- repayment of members' loans.

Often a **treasurer** is appointed in a non-profit organization to look after all financial records. The treasurer will maintain a cash book throughout the year to record everyday transactions. At the year end the receipts and payments account will be prepared summarizing all the detailed information in the cash book. The club's committee and maybe all the members will receive a copy of the receipts and payments account. The account will help them understand why the club's cash funds have changed. The treasurer might use the account as evidence of the need to increase the annual subscription for members, for example.

Illustration 21

Completing a simple receipts and payments account

On 31 December 2018, the receipts and payments account of the Runners Up Sports Club was as follows.

Runners Up Sports Club
Receipts and payments account for the year ended 31 December 2018

	$		$
Balance b/d at 1 January 2018	123	Clubhouse repairs	2210
Subscriptions received	16420	Administration	455
Raffle ticket sales	234	Sports equipment	3100
Social evening ticket sales	4828	Club staff wages	10000
Bar takings	8160	Ground maintenance	600
Balance c/d at 31 December 2018	163	Raffle prizes	242
		Social evening costs	3611
		Staff costs	1010
		Bar purchases	3150
		Bar staff	4100
		Refreshments	1450
	29928		29928
		Balance b/d at 1 January 2019	163

Notes:

- Just as in a cash book, the receipts are recorded on the debit side and the payments are recorded on the credit side.
- The account will begin with an opening balance of any cash held plus the balance at bank. The balance could be overdrawn and so recorded on the credit side.
- The account will conclude with a closing balance to carry down which will combine any cash with the balance at bank.

Practice questions

27. Preparing the receipts and payments account

The following information is available for Hockey First, a local community hockey club, for the year ended 31 March 2018:

	$
Subscriptions received	18620
Bar takings	9460
Bar purchases	6510
Administration	735
Sports equipment	2950
Club staff wages	6050
Ground maintenance	805
Bar staff wages	6460
Refreshments	3450

The cash balance at 1 April 2017 was $450.

Prepare a receipts and payments account for Hockey First for the year ended 31 March 2018.

28. Preparing the receipts and payments account

The treasurer of the Island Astronomy Club has listed the following details concerning about the club's affairs for the year ended 31 December 2018.

	$
Donations from members	1200
General running costs	4580
Hire charges for meeting rooms	3600
Members' subscriptions	14800
Loan repayments	3500
Proceeds from sale of unwanted furniture	320
Purchases of refreshments	2980
Purchase of equipment	4800
Refund of a member's subscription	50
Secretary's honorarium	250
Sales of refreshments	3510
Social evening expenses	860
Ticket sales for social evenings	1090
Wages of café staff	770

Additional information

	At 1 January 2018	At 31 December 2018
	$	$
Cash in hand	1480	690
Balance at bank	2730 (overdrawn)	?

Prepare the club's receipts and payments account for the year ended 31 December 2018. Identify the closing balance and balance at bank.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Develop your exam skills

PAPER 1

1. Limited companies calculate their ordinary share dividend as a percentage of the:
   - A total assets
   - B total reserves
   - C face value of issued capital
   - D face value of authorised capital.

2. A limited company's authorised capital is:
   - A the amount of shares that only company directors are allowed to own
   - B the number of shares that the company is allowed to issue
   - C capital that has been authorised to be spent on non-current assets
   - D capital that has been authorised to be put into reserves.

3. When a limited company sells shares at more than their face value, the difference is credited to:
   - A the income statement
   - B retained earnings
   - C the ordinary share capital account
   - D the share premium account

4. TJZL Ltd has an authorised capital that includes 200 000 10% $1 preference shares, of which 160 000 are issued. These shares are currently being sold for $2 each. Assuming that the company makes sufficient profits, the dividend payment to preference shareholders in any one year will be:
   - A $4 000
   - B $16 000
   - C $20 000
   - D $32 000

5. A limited company's records show the following:

	$
Authorised capital	1 000 000
Issued capital	700 000
10% debentures	500 000

If the directors declare a 10% dividend, what will shareholders receive?
   - A $220 000
   - B $100 000
   - C $70 000
   - D $50 000

6. A limited company has an authorised capital of 400 000 shares of 50¢ each. The issued capital is $150 000. The directors declare a dividend of 10¢ per share.
What will the dividend amount to?
   - A $40 000
   - B $30 000
   - C $20 000
   - D $10 000

7. Which of the following is shown in the income statement of a limited liability company?
   - A Dividends paid
   - B Auditors' fees
   - C Share premium
   - D Asset replacement reserve

8. Which of the following is shown in the appropriation account of a limited liability company?
   - A Directors' remuneration
   - B Debenture interest
   - C Dividends paid
   - D Share premium

9. Which of the following is a capital reserve?
   - A General reserve
   - B Statement of profit and loss balance
   - C Asset replacement reserve
   - D Revaluation reserve

10. In the statement of financial position (balance sheet) of a limited liability company, which of the following is a current liability?
   - A Debentures (2019)
   - B Proposed dividends
   - C Preference share capital
   - D General reserve

11. A limited liability company's gross profit for the year ended 31 December 2018 was $260 000. The company's expenses are: directors' fees $80 000, administration charges $20 000, debenture interest $30 000, depreciation charges $50 000.
   The company's operating profit is:
   - A $180 000
   - B $150 000
   - C $110 000
   - D $80 000

12. A limited liability company's statement of financial position (balance sheet) includes the following:

	$
Authorised share capital	300 000
Issued share capital	160 000
General reserve	20 000
Profit and loss balance	10 000

   The company's total equity based on this information is:
   - A $300 000
   - B $190 000
   - C $180 000
   - D $160 000

13. The excess of expenditure over income in the accounts of a co-operative is called:
   - A a surplus
   - B a profit
   - C a deficit
   - D a loss

14. A voluntary payment made to an officer of a co-operative is called:
   - A a fee
   - B a salary
   - C an honorarium
   - D a wage

15. Which of the following should not be included in the appropriation account of a co-operative?
   - A Transfer to a statutory reserve
   - B Dividends paid
   - C Debenture interest
   - D Transfer to a special reserve

16. Which of the following should not be included in the income and expenditure account of a co-operative?
   - A Annual general meeting costs
   - B Secretary's honorarium
   - C Auditors' charges
   - D Depreciation of non-current assets

17. Which one of the following statements concerning the purpose of a receipts and payments account of a sports club is correct?
   - A Shows the profit or loss made by the sports club
   - B Does not show items of capital expenditure
   - C Shows the financial position throughout the period
   - D Is a summary of a cash book

PAPER 2

Case study 1: Limited liability companies

Sara Cakes Ltd was formed a few years ago by three friends who used to operate as a partnership.

The following is the trial balance for Sara Cakes Ltd at 31 December 2018.

Trial balance at 31 December 2018		
	$	$
10% Debentures 2030–2035		20 000
Accounts payable		22 100
Accounts receivable	36 800	
Administration expenses	3 900	
Auditors' fees	1 400	
Cash at bank	6 000	
Cost of sales	54 500	
Debenture interest	1 000	
Depreciation charge for the year on premises	3 000	
Depreciation charge for the year on vehicles	4 000	
Directors' remuneration	4 100	
Dividends paid: ordinary shares	4 000	
Dividends paid: preference shares	2 000	
General reserve		15 000
Inventory at 31 December 2018	18 500	
Issued share capital: 10% preference shares of $1 each		20 000
Issued share capital: ordinary shares of $1 each		100 000
Premises: cost	170 000	
provision for depreciation at 31 December 2018		8 000
Profit and loss at 1 January 2018		44 400
Rental income		1 500
Revenue		92 000
Selling and distribution costs	3 200	
Share premium		30 000
Vehicles: cost	34 000	
provision for depreciation at 31 December 2018		12 000
Wages and salaries	18 600	
	365 000	365 000

a. List three advantages of operating as a limited company rather than a partnership.

b. List two potential disadvantages of operating as a limited company.

c. Prepare the income statement for the year ended 31 December 2018.

d. Prepare the appropriation account for the year ended 31 December 2018.
e. Prepare the statement of financial position (balance sheet) at 31 December 2018.

Case study 2: Limited liability companies

Lou Kirving Ltd is a successful limited company that has been trading for several years.

The company has one capital reserve: a share premium.

The following is the trial balance for Lou Kirving Ltd at 31 March 2018.

Trial balance at 31 March 2018		
	$	$
10% Debentures 2024–2028		20 000
Accounts payable		10 400
Accounts receivable	16 400	
Administration expenses	14 800	
Auditors' fees	3 000	
Bank overdraft		3 100
Commission received		9 500
Debenture interest paid	1 000	
Directors' remuneration	14 400	
Dividends paid: ordinary shares	1 000	
Dividends paid: preference shares	4 800	
General reserve		10 000
Inventory at 1 April 2017	9 500	
Issued share capital: 6% preference shares of $1 each		80 000
Issued share capital: ordinary shares of $0.50 each		50 000
Premises: cost	230 000	
provision for depreciation at 1 April 2017		18 000
Purchases	54 100	
Retained earnings (profit and loss balance) at 1 April 2017		40 100
Revenue		142 000
Selling and distribution costs	15 200	
Share premium		30 000
Vehicles: cost	32 000	
provision for depreciation at 1 April 2017		12 000
Wages and salaries	28 900	
	425 100	425 100

a. Give *two* other examples of capital reserves.
b. Explain *two* differences between a revenue reserve and a capital reserve.

Additional information

- Inventory at 31 March 2018 was $9 200.
- Debenture interest owing at 31 March 2018 was $1 000.
- Selling costs prepaid at 31 March 2018 were $800.
- Depreciation is charged at 2% on cost per year for the premises and at 20% per year on the vehicles using the reducing-balance method.

c. Prepare the income statement for the year ended 31 March 2018.

d. Prepare the appropriation account for the year ended 31 March 2018.

e. Prepare the statement of financial position (balance sheet) at 31 March 2018.

Case study 3: Non-profit organization

a. Explain how a receipts and payments account can be useful to a club's management committee.

The following information is available for Charlie's Chess Club, a chess club run by a retired teacher from a local village hall, for the year ended 31 October 2018:

	$
Membership subscriptions for the year	2400
Hall hire	685
Receipts from tournaments	810
Tournament expenses	680
Payments for refreshments	300

The cash balance at 1 November 2017 was $450.

Unfortunately, Charlie has been ill and so the records have not been maintained properly. The cash balance at 31 October was $305, which was much lower than usual.

Charlie does not believe all the money received has been banked.

b. Prepare the receipts and payments account for the year ended 31 October 2018 to calculate the amount of unbanked cash.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

10 Manufacturing and inventory control

Setting the scene

All the accounting information and processes to date have been for either trading or service businesses. In this chapter you will consider, for the first time, the financial statements of manufacturers. In other words, you will be looking at businesses which make products.

For all trading and manufacturing businesses the valuation of inventories is a major task. These days many organizations use the latest technology and software programs to keep track of all the goods they deal with. In this chapter you will look at the techniques used to value inventories.

Syllabus coverage

	Syllabus	Unit
1	Distinguish between direct and indirect costs	10.1
2	Prepare manufacturing accounts	
3	Calculate the unit cost of items produced	
4	Prepare final accounts for a manufacturing concern	
5	Apply basic accounting principles	10.2
6	List methods of inventory valuation	10.3
7	Calculate the value of closing inventory using either FIFO or LIFO or AVCO	

10.1 Manufacturing accounts

Objectives

By the end of this unit you will be able to:

- explain the key terms used in preparing manufacturing accounts
- distinguish between and give examples of direct and indirect costs
- prepare a manufacturing account as part of the financial statements
- identify the prime cost, work in progress and cost of production
- calculate the production cost of an individual manufacturing product
- prepare the financial statements for a manufacturing business.

What is a manufacturing account?

A retailer buys and sells completed products, whereas a manufacturer makes products to sell. For example, a clothes designer buys material and employs staff in a factory to sew it into jackets. The jackets are then sold to a retailer who sells them in a fashion boutique in a local shopping centre. A **manufacturing account** is therefore prepared to show all the costs associated with the production of these jackets within the factory.

A simple manufacturing account is split into two sections:

1. The **prime cost** section: in this section, the **direct costs** are listed and totalled. The direct costs are those costs associated with an individual product. They include the cost of raw materials, the cost of labour employed to make the product and any other direct costs.
2. The **factory overheads** section: in this section, all the other costs associated with the production of the products within the factory are identified. They include the factory supervisor's salary, factory rent, machine maintenance and machine depreciation.

Within the manufacturing account, these two sections are combined together to calculate the **cost of production**:

Cost of production = Prime cost + Factory overheads

All other non-production costs, such as administration costs, are recorded within the income statement as they would be for a non-manufacturing business.

Key terms

Manufacturing account: an account prepared at the end of a financial period in order to calculate the production cost of manufactured goods.

Prime cost: the total of all direct costs incurred when producing the products.

Direct costs: costs that are attributable to a particular product, for example direct materials and direct labour.

Factory overheads: the indirect costs incurred in the production of the products, for example depreciation of machinery, factory insurance and factory rent.

Illustration 1

The treatment of different costs within the financial statements of a manufacturing business

Mahabeer Manufacturing Ltd is a small manufacturing company that makes tables. The following shows the treatment of the business costs within the final accounts.

Key terms

Indirect costs: costs that cannot be attributed to a particular product, for example indirect labour such as the wages of supervisory staff.

Cost of production: the total of all the costs of manufacturing products. It is also known as production cost of manufactured goods or production cost of completed goods.

Tip

Remember that the manufacturing account only includes information about the factory and the actual manufacturing process. All other non-production costs such as administration, finance and distribution costs are recorded in the income statement, just as they are for non-manufacturing organizations.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

	Manufacturing account		Income statement
	Prime cost	Factory overheads	
Administration expenses			✓
Direct labour	✓		
Direct materials	✓		
Factory insurance		✓	
Factory rent		✓	
Office salaries			✓
Selling and distribution costs			✓

Practice questions

1. Distinguishing between direct and indirect costs

Identify which of the following costs are direct or indirect manufacturing costs. Place a tick ✓ in the relevant column in the table for each cost.

Cost	Direct	Indirect
Cost of raw materials		
Salary of factory supervisor		
Lease of factory		
Machine depreciation		

2. Distinguishing between direct and indirect costs

Nigel Carr has provided the following information for the year ended 31 January 2018:

	$
Administration costs	56 200
Cost of raw materials	112 600
Factory rent	86 800
Factory heating and lighting	47 000
Manufacturing labour	432 000
Selling and distribution expenses	33 300

Calculate the total direct costs for Nigel Carr's products for the year ended 31 January 2018.

Completing the manufacturing account

When completing a manufacturing account from the trial balance, first identify those costs that are part of the production process. These will be the ones needed and all others will be recorded in the income statement. The direct costs are then recorded within the prime cost section and the other manufacturing costs are recorded in the factory overheads section.

Illustration 2

Completing a simple manufacturing account from a trial balance

On 31 December 2018, an extract of the trial balance of Mahabeer Manufacturing Ltd was as follows. (M/I indicates whether the figure should be included in the manufacturing account or the income statement.)

Mahabeer Manufacturing Ltd			
Trial balance (extract) at 31 December 2018			
	Dr	Cr	
	$	$	M/I
Carriage inwards on raw materials	2 200		M
Carriage outwards	1 800		I
Direct wages	54 600		M
Factory rent	20 100		M
Inventory of raw materials at 1 January 2018	17 400		M
Other factory overheads	32 000		M
Purchase of raw materials	76 800		M
Purchases returns of raw materials		6 700	M
Revenue		234 000	I
Sales returns	5 300		I

The business's inventory of raw materials at 31 December 2018 was valued at $19 500 (M). The machinery was to be depreciated by $11 100 (M).

Here is the business's manufacturing account:

Mahabeer Manufacturing Ltd			
Manufacturing account for the year ended 31 December 2018			
	$	$	$
Inventory of raw materials at 1 January 2018		17 400	
Purchases of raw materials	76 800		
Carriage inwards	2 200		
	79 000		

Notes:

- The *cost of raw materials consumed* calculation consists of: Opening inventory of raw materials + Net purchases – Closing inventory of raw materials. This is a direct cost and part of the prime cost. It is similar to the calculation of cost of goods sold in the trading account but must not be deducted from revenue. Net purchases are calculated with all the usual adjustments for carriage inwards and purchase returns.
- The *cost of production* is the total of all the direct and indirect costs that are involved in the production process. This is sometimes known as "cost of manufacturing", "production cost of manufactured goods" or "production cost of completed goods". It is this figure alone that is transferred to the trading account within the income statement to replace the purchases of inventory.

Purchase returns	6 700		
Net purchases		72 300	
		89 700	
Inventory of raw materials at 31 December 2018		19 500	
Cost of raw materials consumed			70 200
Direct wages			54 600
Prime cost			**124 800**
Depreciation of machinery		11 100	
Factory rent		20 100	
Other factory overheads		32 000	
			63 200
Cost of production			**188 000**

Practice questions

3. Preparing the prime cost section of a manufacturing account

The following information is available for S Ramjeet Ltd, a manufacturer of toys, for the year ended 31 March 2018:

	$
Direct wages	33 600
Factory overheads	16 500
Purchases of raw materials	21 000
Other direct costs	1 800
Inventory of raw materials at 1 April 2017	6 200
Inventory of raw materials at 31 March 2018	7 400

Prepare an extract from the manufacturing account to show the prime cost for the year ended 31 March 2018.

4. Preparing the prime cost section of a manufacturing account

The following information is available for Dorcas Ltd, a manufacturer of cosmetics, for the year ended 31 October 2018:

	$
Purchases of raw materials	132 400
Inventory of raw materials at 1 November 2017	16 850
Inventory of raw materials at 31 October 2018	18 100
Factory wages	144 750
Factory insurance	17 200

Prepare an extract from the manufacturing account to show the prime cost for the year ended 31 October 2018.

5. Preparing a manufacturing account to calculate the cost of production

Kingsdown Doors Ltd has been manufacturing doors for many years. The following information relates to the year ended 30 June 2018:

	$
Inventories at 1 July 2017:	
Raw materials	26 000
Finished goods	35 000
Factory wages	130 500
Factory supervisor's wages	22 500
Purchases of raw materials	132 000
Factory depreciation	12 000
Purchase returns of raw materials	2 300
Carriage inwards on raw materials	1 600
Factory heating and lighting	14 600

Additional information:

- Inventories at 30 June 2018 were: raw materials, $24 500; finished goods, $37 600.

Prepare a manufacturing account for the year ended 30 June 2018 for Kingsdown Doors Ltd, showing clearly:

a. the cost of raw materials consumed
b. the prime cost
c. total factory overheads
d. the cost of production.

6. Preparing a manufacturing account to calculate the cost of production

Anderson plc is a manufacturing business. At the end of the accounting year, 31 March 2018, the following information is available:

	$
Factory wages	150 400
Factory power	432 600
Factory salaries	25 700
Factory rent	42 000
Administrative expenses	43 700
Insurance	4 400
Purchases of raw materials	216 500

Tip

Remember that the cost of production is a total cost calculated by adding the overheads within the manufacturing account to prime cost. It is a common error for students to deduct, rather than add, the overheads.

Tip

It is also important to make sure that the correct labels are used within the manufacturing account, especially "prime cost" and "cost of production".

Revenue	968 900
Purchase returns of raw materials	16 300
Inventories at 1 April 2017:	
Raw materials	27 000
Finished goods	61 400

Additional information:

- Inventories at 31 March 2018 were: raw materials, $28 600; finished goods, $59 400.
- Factory power was in arrears of $1 700.
- Insurance was to be divided 4 : 1 between the factory and administration.

Prepare a manufacturing account for Anderson plc for the year ended 31 March 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

What is work in progress?

Key term

Work in progress: partly finished goods.

Manufacturing is a continuous process and so not all goods are complete or finished at the end of the financial period. These partly finished goods are referred to as inventory of **work in progress**. The movement in work in progress over the financial period is added to the prime cost and factory overheads within the manufacturing account to achieve the cost of production.

The total cost of production in a manufacturing account is therefore made up of:

Prime cost + Factory overheads + Opening work in progress – Closing work in progress

Thus, when completing the manufacturing account, the inventory of work in progress is treated in the same way as any other type of inventory: opening inventory is added to and closing inventory is subtracted from the calculation for cost of production.

Illustration 3

The manufacturing account including inventory of work in progress

The inventories of work in progress for Mahabeer Manufacturing Ltd for the year ended 31 December 2018 were:

- inventory of work in progress at 1 January 2018: $12 500
- inventory of work in progress at 31 December 2018: $14 200.

Mahabeer Manufacturing Ltd Manufacturing account (continued) for the year ended 31 December 2018	
	$
Brought forward from Illustration 2	188 000
Inventory of work in progress at 1 January 2018	12 500
Inventory of work in progress at 31 December 2018	(14 200)
Cost of production of manufactured goods	186 300

Remember that the manufacturing account is an ordered record of the production process, starting from raw materials and going through the production process and costs, then work in progress, to achieve the cost of production.

Unit cost

The production cost per unit can be calculated from:

$$\text{Production cost per unit} = \frac{\text{Production cost}}{\text{Number of units}}.$$

Illustration 4

Calculating the production cost per unit

During the year ended 31 December 2018, Mahabeer Manufacturing Ltd produced 3 000 tables.

From Illustration 3, the cost of production was $186 300, so the production cost per table is:

$$\frac{\$186\,300}{3\,000} = \$62.10.$$

This figure can be used by the business to make some important decisions.

The non-production cost (administration costs, etc.) per table can be added to the production cost per table to achieve the full cost per unit.

For example, if the non-production cost per table is $27.90, the full cost per table is $62.10 + $27.90 = $90. The business can use this information to calculate the selling price. For example, if the business uses a mark-up of 40%, the selling price will be 1.4 × $90 = $126.

Practice questions

7. Preparing a manufacturing account with work in progress; calculating the cost of production per unit

Persad plc is a manufacturing business. The following figures have been extracted from the company's ledgers as at 31 May 2018:

	$
Inventories at 1 June 2017:	
Raw materials	21 450
Work in progress	14 780
Finished goods	58 620
Revenue	657 000
Purchases of raw materials	234 090
Direct labour costs	260 000
Indirect labour costs	82 800
Factory overheads (excluding indirect labour costs)	138 000
Sales returns	1 000
Purchases returns on raw materials	980
Carriage inwards on raw materials	750
Carriage outwards	1 340

Additional information:

- At 31 May 2018, inventories were valued as follows: raw materials, $22 170; work in progress, $13 750; finished goods, $60 650.
- At 31 May 2018, factory wages due but unpaid amounted to $8 000. One quarter of this was for indirect labour and the remainder was for direct labour.
- Depreciation charge for factory machinery for the year was $25 000.

a. Prepare the manufacturing account for the year ended 31 May 2018.
b. Explain what is meant by "work in progress".
c. Calculate the production cost per unit, assuming 35 000 products were made.

8. Preparing the manufacturing account with work in progress; calculating the cost of production per unit

I McKoy Ltd manufactures carpets. The following information is available at 30 April 2018:

	$
Carriage inwards on raw materials	600
Purchases returns on raw materials	1 400
Direct labour	25 400
Purchases of raw materials	16 800
Factory rent	26 800
Factory electricity	16 500
Factory machinery depreciation	9 100

Additional information:

- Inventories in year:

	Inventories at 1 May 2017	Inventories at 30 April 2018
	$	$
Raw materials	12 100	14 300
Work in progress	24 300	23 500
Finished goods	31 500	32 900

- For the year ended 30 April 2018, $1 400 was owing for factory rent and $200 had been prepaid for factory electricity.
- The company produced 1 200 carpets during the year.

a. Prepare the manufacturing account for the year ended 30 April 2018.

b. Calculate the production cost per carpet.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

The trading account

At the end of the production process, the cost of production is transferred from the manufacturing account to the trading account. The cost of production figure replaces the purchases of goods for resale within the calculation of cost of goods sold.

The completed goods are referred to as **finished goods**. The trading account is concerned with comparing the revenue from selling finished goods with the cost of finished goods sold.

Key term

Finished goods: fully completed goods.

Illustration 5

Preparing the trading section of an income statement for a manufacturing business

The inventories of finished goods for Mahabeer Manufacturing Ltd for the year ended 31 December 2018 were:

- at 1 January 2018: $25 100
- at 31 December 2018: $29 400.

Mahabeer Manufacturing Ltd Income statement (trading section) for the year ended 31 December 2018		
	$	$
Revenue	234 000	
Less sales returns	5 300	
		228 700
Opening inventory of finished goods	25 100	
Cost of production of finished goods	186 300	
	211 400	
Closing inventory of finished goods	29 400	
Cost of sales		182 000
Gross profit		46 700

Note:

- A manufacturer's trading account is similar to that of a non-manufacturing organization. The key difference is that "purchases" is replaced by the cost of production.

Recording inventory in the statement of financial position (balance sheet)

There are three types of inventory within a manufacturing business:

1. inventory of raw materials
2. inventory of work in progress
3. inventory of finished goods.

As you know, a retailer or wholesaler has just one type of inventory: goods for resale.

The statement of financial position (balance sheet) for a manufacturing business includes all three types of inventory held at the year end within the current assets.

Mahabeer Manufacturing Ltd Statement of financial position (balance sheet) (extract) at 31 December 2018	
	$
CURRENT ASSETS	
Inventory of raw materials	19 500
Inventory of work in progress	14 200
Inventory of finished goods	29 400
	63 100

Dividing costs between the manufacturing account and the income statement

Often costs are not related only to the production section of the business or only to the non-production section, but to both. In this instance, the costs will be divided between the manufacturing account and the income statement.

Illustration 6

Allocating costs to the manufacturing account and income statement

During the year ended 31 December 2018, Enneka Enterprise Ltd paid $56 000 for buildings insurance. Of this, 75% related to the factory and 25% to the administration buildings.

The insurance will therefore be recorded as follows:

	Manufacturing account (indirect factory expenses)	Income statement (non-production expenses)
	$	$
Buildings insurance	56 000 × 75% = 42 000	56 000 × 25% = 14 000

Practice questions

9. Preparing the final accounts and extract from the statement of financial position (balance sheet) to show inventory

G Singh is a manufacturer of office desks. For the year ended 31 July 2018, the following information was made available:

	$
Factory wages	50 400
Factory power	42 600
Factory salaries	25 700
Factory rent	62 000
Administrative expenses	43 700
Insurance	8 400
Purchases of raw materials	116 500
Revenue	468 900
Sales returns	8 200
Purchase returns	16 300
Inventories at 1 August 2017:	
Raw materials	27 000
Work in progress	31 200
Finished goods	41 400

Additional information:

- Inventories at 31 July 2018 were: raw materials, $28 600; work in progress, $36 500; finished goods, $49 400.
- Factory power was in arrears of $2 700.
- Insurance was to be divided 3 : 1 between the factory and the rest of the business.
- Factory power was divided 10% to direct costs and the rest to indirect costs.

Prepare the following:

a. the manufacturing account and income statement for the year ended 31 July 2018

b. an extract from the statement of financial position (balance sheet) at 31 July 2018, showing how inventories should be recorded.

10. Preparing the final accounts and extract from the statement of financial position (balance sheet) to show inventory

Navin plc manufactures cricket bats. The following information is available for the year ended 31 January 2018:

	$000
Carriage inwards on raw materials	15
Carriage outwards	21
Factory wages	460
Heating and lighting	68
Inventories at 1 February 2017:	
Raw materials	42
Work in progress	19
Finished goods	132
Machinery at cost	340
Office equipment at cost	90
Office salaries	245
Power	110
Purchase of raw materials	567
Rent and rates	84
Revenue	1846

Additional information:

- Inventories at 31 January 2018 were (in $000): raw materials, $65; work in progress, $22; finished goods, $146.
- 60% of the factory wages are direct and the rest are indirect.
- 75% of both the heating and lighting and rent and rates are to be allocated to the factory and the rest to the office.
- 80% of the power costs are to be allocated to the factory and 20% to the office.
- Depreciation is to be charged on the machinery at 20% per annum using the straight-line method.
- Depreciation is to be charged on the office equipment at 10% per annum using the straight-line method.

Prepare the following:

a. the manufacturing account for the year ended 31 January 2018
b. the income statement for the year ended 31 January 2018
c. an extract from the statement of financial position (balance sheet) as at 31 January 2018 to show the inventories.

10.2 Applying basic costing principles

Objectives

By the end of this unit you will be able to apply:

- cost-plus and mark-up pricing
- allocate and apportion indirect costs
- calculate absorption rates
- calculate the selling price of projects using absorption costing.

Cost-plus pricing

The costs of production consist of:

Material direct costs
+
Labour direct costs
+
Indirect costs
=
TOTAL COST

This information can be used to calculate the cost of producing a single product (see Illustration 7) and also for establishing a selling price for the product.

In some organizations the selling price of a product is based on taking the cost of producing a single product and then adding a mark-up to the cost. (The mark-up ratio was covered in Chapter 5). This process is sometimes referred to as **cost-plus pricing** or mark-up pricing.

Key term

Cost-plus pricing: where the selling price of a product is based on adding a pre-determined mark-up to the unit cost of a product. (This process is also referred to as mark-up pricing.)

Illustration 7

Calculating the selling price of a single product using mark-up

Walter manufactures hurdles for athletics competitions. During a typical month Walter manufactures 50 hurdles. The total monthly costs are:

	$
Direct materials	210
Direct labour	480
Indirect costs	460
Total costs	1 150

So the cost of making one hurdle is $1 150/50 = $23

Walter calculates the selling price of a hurdle by applying a mark-up of 50%.

So the selling price of a hurdle is:

	$
Cost per unit	23.00
Mark-up (50%)	11.50
Selling price	34.50

Walter will make a profit of $11.50 on every hurdle that is sold, assuming there is no change in the costs of making a hurdle.

Practice questions

11. Cost-plus pricing

Kersha manufactures a particular design of garden umbrellas. During a typical month Kersha makes 120 products. The following costs are incurred:

	$
Direct materials	420
Direct labour	510
Indirect costs	2670

Kersha's policy is to calculate a selling price using a mark-up of 60%.

a. Calculate the selling price of one windbreak.

The Baysands Hotel has ordered 25 umbrellas from Kersha.

b. Calculate the profit to be made on this order.

12. Cost-plus pricing

Shantal manufactures a particular design of barbeque. During a typical month Shantal makes 70 products. The following costs are incurred:

	$
Direct materials	2940
Direct labour	2380
Indirect costs	6300

Shantal's policy is to calculate a selling price using a mark-up of 40%.

a. Calculate the selling price of one barbeque.

Home Retailers Ltd has ordered 12 barbeques from Shantal.

b. Calculate the profit to be made on this order.

13. Cost-plus pricing

Carlos manufactures a particular item of sports equipment. During a typical month 250 items are produced. The following information is available about costs.

Direct costs per item:

	$
Direct materials	
Wood type A	1.5 kg at $15.40 per kg
Wood type B	0.25 kg at $24.60 per kg
Direct labour	
Machining	2.4 hours at $12 per hour
Assembly	0.8 hours at $9 per hour

Indirect costs per month:

	$
Factory rent	1400
Depreciation of machinery	950
Factory maintenance	190
Indirect labour	3480

Carlos's policy is to calculate a selling price using a mark-up of $33\frac{1}{3}\%$

a. Calculate the direct cost per unit.

b. Calculate the indirect cost per unit.

c. Calculate the selling price of a unit.

State Sports Ltd has ordered 160 units.

d. Calculate the profit to be made on this order.

14. Cost-plus pricing

Sophie manufactures a high-quality occasional table. During a typical month 40 products are made. The following costs are incurred:

Direct costs per table:

	$
Direct materials	
Wood	4 kg at $8.20 per kg
Glass	2.5 kg at $11.80 per kg
Direct labour	
Cutting	1.8 hours at $12 per hour
Assembly	1.25 hours at $10 per hour

Indirect costs per month:

	$
Factory rent	2350
Depreciation of machinery	480
Electricity charges	390
Manager's salary	1880

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Sophie's policy is to calculate a selling price using a mark-up of 75%.

a. Calculate the direct cost per table.
b. Calculate the indirect cost per table.
c. Calculate the selling price of a table.

Deluxe Furnishings Ltd has ordered 20 occasional tables.

d. Calculate the profit to be made on this order.

Absorption costing – an introduction

Judging the right selling price for a product or service is critical for the success of a business. The selling price must:

- ensure that all costs are recovered
- ensure that an adequate profit is made for the organization
- be competitive so that sales are not lost to rival businesses.

Allocating and absorbing indirect costs

Setting a selling price depends on being able to calculate accurately the cost of the product or service that is being provided. This may be quite easy where making the unit or providing the service is quite straightforward. However, in many cases complex procedures may be required where work is carried out in various departments, sometimes called **cost centres**.

Key terms

Cost centre: parts of a business to which costs can be allocated and apportioned.

Allocate: where an entire indirect cost is charged to a cost centre.

Apportion: where indirect costs are divided between cost centres in a rational manner.

Where there are a number of departments/cost centres, the following situations are likely to arise concerning indirect costs:

- Some indirect costs can easily be attributed to each department where the indirect cost is specific to that department (e.g., the salary of the department's manager). Where this situation occurs it is usual to say a cost has been **allocated** to the department.
- Some indirect costs may apply to the business as a whole. The problem which arises in these situations is how to share out the indirect cost to particular departments. In these cases, indirect costs have to be **apportioned** to each department in some rational manner.

Illustration 8

Allocating and apportioning indirect costs

Kerron owns a car repair business. Motorists who have had an accident in which their car has been damaged bring their vehicle to Kerron for repairs. There are two departments: repairing and respraying.

Step 1: allocating indirect costs

Some indirect costs can be allocated to each department as follows, as they are specific to that department:

Annual indirect cost	Repairs department	Respray department
	$	$
Supervisor's salary	24 000	21 000
Depreciation of equipment	11 000	5 000

Step 2: apportioning indirect costs

Some other indirect costs apply to the business as a whole so they have to be apportioned between the two departments. These costs are:

	$
Rent of workshop	18 000
Electricity charges	5 800

These costs will have to be apportioned between the two departments using some rational basis.

Rent: should be apportioned on the basis of the floor space occupied by each department in the workshop. Here is an example for Kerron's business.

	Floor space (sq m)	Percentage floor space for each department	Apportionment of rent
Repairs department	1200	1 200/1 600 = 75%	75% × $18 000 = $13 500
Respraying department	400	400/1 600 = 25%	25% × $18 000 = $4 500

Electricity charges: should be apportioned on the basis of the kilowatt hours available in each department.

	Kilowatt hours	Percentage kilowatt hours for each department	Apportionment of electricity charges
Repairs department	14 000	14 000/20 000 = 70%	70% × $5 800 = $4 060
Respraying department	6 000	6 000/20 000 = 30%	30% × $5 800 = $1 740

Step 3: calculating total indirect costs for each department

It is now possible to add together the allocated costs and the apportioned costs to obtain a figure for total indirect costs for each department.

	Repairs department	Respray department
	$	$
Allocated costs		
Supervisor's salary	24 000	21 000
Depreciation of equipment	11 000	5 000
Apportioned costs		
Rent	13 500	4 500
Electricity charges	4 060	1 740
Total indirect costs	52 560	32 240

Calculating absorption rates

Once the total indirect costs are known for each department, it is possible to calculate what are called absorption rates. Absorption rates provide a means of attributing some portion of a department's total overheads to each job (or unit of production), depending on how many labour hours or machine hours the job takes in each department. Labour hours is used as the basis of calculating the absorption rate where this is the dominant factor in the department; machine hours is used to calculate the absorption rate where machine hours is the dominant factor in the department.

Illustration 9

Calculating absorption rates

Returning to Kerron's car repair business, it will be possible to work out absorption rates when some details are available about labour hours and machine hours available in each of the two departments.

The details are:

	Labour hours per annum	Machine hours per annum
Repairs department	1 200	1 600
Respray department	700	500

Step 1: Decide which is the dominant factor in each department.

	Dominant factor
Repairs department	machine hours
Respray department	labour hours

Step 2: Calculate an overhead absorption rate for each department.

The calculations are as follows:

	Dominant factor	Absorption rate calculation (Total overheads/hours)	Absorption rate
Repairs department	machine hours	$52 560/1 600	$32.85 per machine hour
Respray department	labour hours	$32 240/700	$46.06 per labour hour

This means that for every job:

- a machine hour in the repairs department will be charged $32.85 in overheads
- a labour hour in the respray department will be charged $46.06 in overheads.

Pricing a particular job

Once absorption rates are calculated it will be possible to work out the selling price for a product or a particular job that will ensure the business covers its costs and makes a profit.

Working out the price for a product or job will be based on the following process:

Direct materials for each product or job
+
Direct labour required for each product or job
+
Indirect costs for a department using the overhead absorption rate
+
Indirect costs for a department using the overhead absorption rate (and so on ...)
=
Total cost of the product or job
+
Mark-up to give the profit on the product or job
=
Selling price charged to the customer

Illustration 10

Calculating the price to be charged to a customer for repairing a damaged car

Seeta recently had a motoring accident. She has taken her damaged car to Kerron's business for repairs to be carried out.

Notes:

- The breakdown of the charge to Seeta shows that she will pay not just for the spare parts and labour involved but also pay a proportion of Kerron's overhead costs.
- Kerron will make a profit of $360.19 on this particular job.
- You will notice that calculations are made to 2 decimal places throughout. It is important not to round up figures at an early stage in the procedure; otherwise there will be some degree of inaccuracy in working out the final charge to the customer.

The work on Seeta's car involved the following:

Direct materials	Spare parts replacing those damaged	Total cost $380
Direct labour	4 hours in the repairs department	Labour is paid $14 per hour
	2 hours in the respray department	
Machine hours	5 hours in the repairs department	
	1.5 hours in the respray department	

Kerron's policy is to mark-up the cost of each job by 50%.

Here is the calculation of the amount charged to Seeta to have her car repaired.

		$
Direct materials	Replacement spare parts	380.00
Direct labour	6 hours at $14 per hour	84.00
Overheads: Repairs department	Machine hours 5 × overhead absorption rate $32.85 per machine hour	164.25
Overheads: Respray department	Labour hours 2 × overhead absorption rate $46.06 per labour hour	92.12
Total cost		720.37
Mark-up (50% of cost)		360.19
Total charge to customer		**1080.56**

Practice questions

15. Allocating and apportioning indirect costs

Faye produces magazines for local schools and colleges. There are two cost centres: printing department, assembly department.

The following details are available about indirect costs for November 2018:

Allocated costs:

	Printing department	Assembly department
	$	$
Department manager's salary	2400	2100
Depreciation of equipment	400	100

Costs to be apportioned:

	$ per month
Rent of premises	800
Insurance of equipment	1800

The following data have been provided about the business:

	Printing department	Assembly department
Rent of premises (sq m)	1 600	400
Replacement value of equipment ($)	96 000	12 000

Prepare a table to show the total indirect costs allocated and apportioned to each of the departments for November 2018. (Note: you will use your answer in Question 17.)

16. Allocating and apportioning indirect costs

Supaform Ltd is a manufacturing business. It has two cost centres: machining department and finishing department.

The following details are available about indirect costs for September 2018.

Allocated costs:

	Machining department	Finishing department
	$	$
Supervisor's salary	2900	2500
Depreciation of machinery	5000	1200

Costs to be apportioned:

	$ per month
Power	5400
Factory rent	10000

The following data has been provided about the business:

	Machining department	Finishing department
Power (kilowatt hours)	5000	1 000
Floor space (sq m)	1800	600

Prepare a table to show the total indirect costs allocated and apportioned to each of the departments. (Note: you will use your answer in Question 18.)

17. Calculating absorption rates

Returning to Faye's business (see Question 15), the following details are available about labour hours and machine hours in the two cost centres.

	Labour hours per month	Machine hours per month
Printing department	800	1000
Assembly department	900	300

Calculate absorptions rate for each department. (You will use your answer in Question 19.)

18. Calculating absorption rates

Returning to Supaform Ltd (see Question 16), the following details are available about labour hours and machine hours in the two cost centres.

	Labour hours per month	Machine hours per month
Machining department	600	2 400
Finishing department	600	150

Calculate absorption rates for each department. (You will use your answer in Question 20.)

19. Pricing a job

In November Faye produced a magazine for the local college (see Questions 15 and 17). The following details are available about this particular job.

Direct materials	Paper and printing ink costs, etc.	$1 800
Direct labour	7 hours in the printing department	Labour is paid $15 per hour
	3 hours in the assembly department	
Machine hours	12 hours in the printing department	
	5 hours in the assembly department	

Faye's policy is to apply a mark-up of 75% to all jobs.

a. Calculate the charge for this job.

b. State how much profit Faye will make on this job.

20. Pricing a job

In November Supaform Ltd received an order from a customer (see Questions 16 and 18). The following details are available about this particular order.

Direct materials		$4 800
Direct labour	14 hours in the machining department	Labour is paid $12 per hour
	6 hours in the finishing department	
Machine hours	22 hours in the machining department	
	4 hours in the finishing department	

The company's policy is to apply a mark-up of 40% to all jobs.

a. Calculate the charge for this job.

b. State how much profit Supaform Ltd will make on this job.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

10.3 Inventory control

Objectives

By the end of this unit you will be able to:

- list methods of inventory valuation
- calculate the value of inventories using the FIFO (first in first out) method
- calculate the value of inventories using the LIFO (last in first out) method
- calculate the value of inventories using the AVCO (weighted average cost) method
- prepare trading accounts using the three methods for valuing inventories
- assess the effect of different methods of inventory valuation on profits.

How do businesses value their inventories?

Traditionally, the figures used in the accounting system for opening and closing inventories would result from what is called a physical check on unsold items, where members of staff count all the items on shelves in the retail areas and in the store rooms. Nowadays, of course, developments in the use of electronic systems mean that it is becoming increasingly common for all movements in inventory to be tracked and recorded using software programmes.

If both physical checks and electronic systems are used, businesses often find there is a difference between the figures obtained. This may be due to a variety of factors, including:

- human error in counting items or in entering information using the software programme
- failure to keep a proper record of wastage: items no longer available because they are damaged or have gone beyond their sell-by date
- loss of inventory from pilferage (stealing small quantities) by employees or customers.

The problem of valuing inventory at cost

The basic rule about valuing any asset is that it should be valued at cost. Normally this does not cause any difficulty and everyone is likely to be able to agree on what cost is. However, applying this rule to the valuation of inventories can cause some problems.

For example, look at this sequence of events:

- Day 1: purchased 10 items for $10 each.
- Day 2: purchased a further 10 items for $11 each.
- Day 3: sold 12 items for $20 each.

The answer to the question "How many items are left unsold?" is very straightforward: purchased 20 items and sold 12, so there should be 8 items left on the shelf. However, what is the cost of each of these

Key terms

FIFO: a method of inventory valuation where the cost of unsold goods is established by assuming that the first items received were the first items to be issued, that is, first in first out.

LIFO: a method of inventory valuation where the cost of unsold goods is established by assuming that the last items received were the first items to be issued, that is, last in first out.

AVCO: a method of inventory valuation where the cost of unsold goods is established by calculating a weighted average of the cost of unsold items each time new items are received.

Note:

- The key moment occurs on 21 March when you have to decide which of the items listed have been sold. With the FIFO method, it is the earliest purchases that are the first to be sold.

8 items? Is it $10 each, $11 each or some combination of these figures. In other words, where the purchase price of the products you sell is changing (due to inflation or deflation), what is the cost? To solve this problem, businesses use one of three methods to establish cost:

- The assumption is made that the first things received were the first things to be sold (this method is called the "first in first out" method and is usually abbreviated as **FIFO**).
- The assumption is made that the last things received were the first things to be sold (this method is called the "last in first out" method, abbreviated as **LIFO**).
- An average cost is worked out for items in inventory following each new purchase (this method is often referred to as the **AVCO** method – in full, the weighted average cost method).

Illustration 11

Using FIFO to find a value for closing inventory

Here are some details in movements in inventory for a retail business. (The same details will be used to show you how to use each of the three methods.)

Date		Received	Issued
March	1	10 items @ $20 each	
	8		Sold 5 items @ $25 each
	14	10 items @ $22 each	
	21		Sold 7 items @ $25 each

You can see that 20 items were purchased and 12 items sold, so there are 8 unsold items.

If it is assumed that the first items purchased are the first things to be sold, all the items purchased at $20 each will have been sold, leaving 8 items of $22 each (total value $176).

Here is a table showing how to calculate inventory values in a systematic way.

FIFO inventory calculations					
Date		Inventory in	Inventory out	Unsold inventory	Value of inventory
March	1	10 @ $20 each		10 @ $20 each	$200
	8		5 @ $25 each	5 @ $20 each	$100
	14	10 @ $22 each		5 @ $20 each 10 @ $22 each	$320
	21		7 @ $25 each	8 @ $22 each	$176

Practice questions

21. Using the FIFO method

A retailer sells a popular electronic device called an Epad. The following information is available about this item.

Date		Received	Issued
Aug	3	20 items @ $600 each	
	7		Sold 12 items @ $750 each
	14	20 items @ $620 each	
	21		Sold 11 items @ $750 each

Prepare a table showing how the unsold items will be valued using the FIFO (first in first out) method of inventory valuation.

22. Using the FIFO method

A retailer sells mobile phones. Details about the inventory for one particular model, the Callu, are given below.

Date		Received	Issued
Feb	5	40 items @ $100 each	
	11		Sold 30 items @ $150 each
	14	40 items @ $110 each	
	21		Sold 30 items @ $150 each

Prepare a table showing how the unsold items will be valued using the FIFO (first in first out) method of inventory valuation.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Illustration 12

Using LIFO to find a value for closing inventory

Here is a rerun of the inventory calculation, but this time making the assumption that the last things received were the first to be sold.

LIFO inventory calculations					
Date		Inventory in	Inventory out	Unsold inventory	Value of inventory
March	1	10 @ $20 each		10 @ $20 each	$200
	8		5 @ $25 each	5 @ $20 each	$100
	14	10 @ $22 each		5 @ $20 each 10 @ $22 each	$320
	21		7 @ $25 each	5 @ $20 each 3 @ $22 each	$166

Note:

- The key moment in the table is again when goods are sold on 21 March. This time, with the LIFO method, it is the latest purchases that are the first to be sold.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Practice questions

23. Using the LIFO method

Using the data in Question 11, recalculate the value of the closing inventory using the LIFO (last in first out) method of inventory valuation.

24. Using the LIFO method

Using the data in Question 12, recalculate the value of the closing inventory using the LIFO (last in first out) method of inventory valuation.

Illustration 13

Using AVCO to find a value for closing inventory

Here is another rerun of the inventory calculation, but this time the average cost of the items left unsold has to be calculated.

AVCO inventory calculations						
Date		Inventory in	Inventory out	Unsold inventory	Calculation of average cost	Value of inventory
March	1	10 @ $20 each		10 @ $20 each	$20	$200
	8		5 @ $25 each	5 @ $20 each	$20	$100
	14	10 @ $22 each		5 @ $20 each 10 @ $22 each	5 @ $20 = $100 10 @ $22 = $220 so average cost per unit is ($320/15) = $21.33	$320
	21		7 @ $25 each	8 items @ $21.33	$21.33	$170.67

Notes:

- This method requires some more complicated calculations, so there is an extra column in the table to show how the average cost is calculated.
- The key moment in this table occurs on 14 March, when the second purchase takes place. It is necessary to calculate an average value for unsold items, because there are some items which were purchased at $20 each and some new items purchased at $22 each.

Practice questions

25. Using the AVCO method

Using the data in Question 11, recalculate the value of the closing inventory using the AVCO (weighted average cost) method of inventory valuation.

26. Using the AVCO method

Using the data in Question 12, recalculate the value of the closing inventory using the AVCO (weighted average cost) method of inventory valuation.

How do these methods affect profit calculations?

Each of the three inventory valuation methods produces a different figure for the closing inventory. As a result, the trading account will show a different gross profit.

Illustration 14

Calculating gross profit using FIFO, LIFO and AVCO

Using the information from Illustrations 11–13, it is possible to produce three different versions of this business trading account.

Trading account (showing effect of three inventory valuation methods)

	Using FIFO		Using LIFO		Using AVCO	
	$	$	$	$	$	$
Revenue (5 @ $25 and 7 @ $25)		300		300		300
Purchases (10 @ $20 and 10 @ $22)	420		420		420.00	
Less closing inventory	**176**		**166**		**170.67**	
Cost of sales		244		254		249.33
Gross profit		**56**		**46**		**50.67**

Do these different results matter? In the short term (one year) they could make a real difference. However, over time, you may be surprised to learn, the figures will even themselves out. This is because, as you know, one year's closing inventory becomes the following year's opening inventory. So, a higher figure for closing inventory, giving rise to a higher gross profit figure, becomes a higher opening inventory figure next year, with the reverse effect (that is, lowering profit).

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Notes:

- Each method produces different figures for cost of sales and for gross profit.
- When prices are rising (as in this example), FIFO produces the highest figure for gross profit, LIFO the lowest and AVCO a value somewhere between the two.

Practice questions

27. The effect of different methods on profits

Use the results of your answers to Questions 11, 13 and 15 to produce a trading account showing how the gross profit will differ for each method of inventory valuation.

28. The effect of different methods on profits

Use the results of your answers to Questions 12, 14 and 16 to produce a trading account showing how the gross profit will differ for each method of inventory valuation.

29. Using all inventory valuation methods

Gregory Samaroo sells high fashion clothes for women. The following information relates to item TBXY, which is a brand-name outfit for evening wear.

On 1 August, Gregory had five of item TBXY in his business's storeroom, valued at $230 each. The following information is available about purchases and sales of this item in August.

Date		Received	Issued
Aug	3	4 items @ $240 each	
	9		Sold 4 items @ $ 320 each
	15	6 items @ $250 each	
	21		Sold 4 items @ $320 each
	24	5 items @ $260 each	
	27		Sold 6 items @ $320 each

Calculate the value of unsold inventory at 31 August using the following methods of valuation:

a. FIFO **b.** LIFO **c.** AVCO.

In each case, set out a table to show movements in inventory.

30. Using all inventory valuation methods

Doreen Watson sells accessories for bicycles. The following information relates to a gadget (model BBUL) which measures and records speed, distance travelled, etc.

On 1 May, Doreen had two of model BBUL in her business's storeroom, valued at $120 each. The following information is available about purchases and sales of this item in May.

Date		Received	Issued
May	5	4 items @ $130 each	
	8		Sold 3 items @ $180 each
	14	10 items @ $135 each	
	17		Sold 9 items @ $180 each
	21	8 items @ $140 each	
	29		Sold 5 items @ $180 each

Calculate the value of unsold inventory at 31 May using the following methods of valuation:

a. FIFO **b.** LIFO **c.** AVCO.

In each case, set out a table to show movements in inventory.

31. Preparing end-of-year financial statements

Shanika owns a wholesale business supplying kitchen equipment. Her business's financial year ended on 31 December 2018. Here is the business's trial balance on that date.

Trial balance at 31 December 2018		
	$	$
Accounts payable		24 500
Accounts receivable	17 200	
Capital		496 300
Cash at bank	8 500	
Drawings	44 700	
Inventory at 1 January 2018	41 900	
Non-current assets	500 000	
Operating expenses	82 700	
Purchases	421 000	
Returns	5 100	8 300
Revenue		592 000
	1 121 100	1 121 100

Additional information:

- Most of the business's unsold inventory at 31 December 2018 has already been valued at $38 300.
- The value of unsold dishwashers of a particular model has not yet been calculated. Details of inventory movements in this product for December 2018 are given below.

Date		Received	Issued
Dec	1	10 unsold dishwashers in store valued at $500 each	
	8	20 items @ $520 each	
	14		Sold 12 items @ $620 each

a. Calculate the value of the unsold model of dishwasher at 31 December 2018 using the FIFO method

b. Prepare the income statement for the year ended 31 December 2018 – adjust the figure for the inventory, $38 300, to include the value of unsold dishwashers

c. Prepare the statement of financial position (balance sheet) at 31 December 2018.

32. Preparing end-of-year financial statements

Dillon is a wholesaler. His business's financial year ended on 31 July 2018. Here is the business's trial balance on that date.

Trial balance at 31 July 2018		
	$	$
Accounts payable		14 760
Accounts receivable	8 390	
Bank overdraft		3 400
Capital		452 120
Carriage inwards	3 540	

Discounts allowed	680	470
Drawings	38 850	
Inventory at 1 August 2017	27 550	
Non-current assets	385 200	
Operating expenses	113 740	
Purchases	275 310	
Returns	4 490	2 720
Revenue		384 280
	857 750	857 750

Additional information:

- The business's inventory of unsold goods on 31 July 2018 was valued at $29 220.
- This figure needs to be adjusted to include the value of the unsold items of a particular model. Details of inventory movements in this model during July 2018 are shown in the table below.

Date		Received	Issued
July	1	30 items @ $60 each	
	9	40 items @ $65 each	
	21		Sold 30 items @ $120 each

Prepare the following:

a. a calculation of the value of the unsold model at 31 July 2018 using the LIFO method
b. the income statement for the year ended 31 July 2018
c. the statement of financial position (balance sheet) at 31 July 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Changing methods

You might be wondering whether it would be possible for the owner of a business to change from one method to another from year to year. This is where it is important to apply the consistency concept (see Chapter 6). You will remember, this rule requires those who prepare accounting records to use the same methods and procedures from one year to the next. The rule is important because it means that those using the accounting statements can be confident that they have been prepared in the same way, so that any conclusions they draw from the accounts can be considered reliable. However, if the owner of a business could make a really strong case for changing the inventory valuation method, then this would be permitted. However, in this case all the financial statements would have to make it clear that this had happened, and alternative figures using the previous method provided for the user of the accounts.

Develop your exam skills

PAPER 1

1. Which one of the following is a direct cost?
   - A Factory rent
   - B Production workers' wages
   - C Factory supervisor's salary
   - D Factory machine maintenance

2. Which one of the following is required when calculating prime cost?
   - A Office wages
   - B Manufacturing wages
   - C Depreciation of machinery
   - D Factory water charges

3. Which of the following expenses would vary with the amount of goods produced?
   - A Wages paid to machine operators
   - B Works manager's salary
   - C Rent of factory production units
   - D Insurance premium on factory buildings

4. Ignoring work in progress, which one of the following statements correctly defines factory cost of production?
   - A Raw materials purchased plus indirect costs
   - B Prime cost plus factory overheads
   - C Prime cost minus factory overheads
   - D Prime costs plus direct costs

5. When preparing the final accounts of a manufacturing business, carriage inwards on raw materials should always be included in:
   - A the income statement
   - B the manufacturing account
   - C the trading account
   - D the appropriation account.

6. A company's trial balance includes the following items:

	$
Raw materials	100 000
Direct wages	85 000
Factory rent	60 000
Insurance	8 000
Machinery depreciation	12 000

Which of the following figures represents the manufacturer's prime cost?
   - A $80 000
   - B $185 000
   - C $253 000
   - D $265 000

7. For the year ended 31 December 2018, the prime cost was $80 000, factory overheads totalled $120 000, work in progress at 1 January 2018 was $20 000 and at 31 December 2018 was $30 000. What was the cost of production of finished goods?
   - A $190 000
   - B $200 000
   - C $210 000
   - D $220 000

8. The following figures have been taken from the accounts of a manufacturing organization:

	$
Cost of raw materials used	90 000
Direct wages	50 000
Indirect wages	30 000
Direct expenses	40 000
Indirect expenses	20 000

Which of the following figures represents the manufacturer's prime cost?
   - A $230 000
   - B $180 000
   - C $140 000
   - D $90 000

9. The following information is available about a business's inventory for the month of January 2018. At the beginning of the month, the inventory consisted of 3 items that cost $10 each. During January the following transactions occurred:
   - January 10, purchased 9 items costing $10 each
   - January 18, purchased 12 items costing $11 each
   - January 27, sold 14 items at $20 each.

   What was the value of the inventory on 31 January using the FIFO method of inventory valuation?

   A $110
   B $100
   C $77
   D $70

PAPER 2

Case Study 1: Manufacturing organization

Nikolai owns a manufacturing business producing office desks.

a. Explain the meaning of the term "prime cost".

Nikolai has provided the following information for the year ended 30 September 2018.

Inventories		
	At 1 October 2017	At 30 September 2018
	$	$
Raw materials	10 730	12 390
Work in progress	3 420	5 090
Finished goods	14 880	13 560

	$
Carriage inwards on raw materials	4 840
Direct wages	171 900
Electricity	8 200
Factory supervisors' salaries	38 880
Insurance	7 620
Machinery depreciation	45 400
Purchases of raw materials	141 350
Purchase returns (raw materials)	2 210

Electricity should be shared: 75% factory; 25% office.

Insurance $120 was prepaid at 30 September 2018. Insurance should be shared 80% factory; 20% office.

b. Prepare a manufacturing account for the year ended 30 September 2018. Identify **(i)** cost of raw materials used, **(ii)** prime cost, **(iii)** cost of production.

During the year ended 30 September 2018, 800 office desks were produced.

c. Calculate the cost of producing one office desk.

Nikolai calculates the selling price of an office desk based on a mark-up of 25%.

d. Calculate the selling price of an office desk.

Case Study 2: Applying basic costing principles

a. Explain the difference between allocating an indirect cost and apportioning an indirect cost.

Supersurf Ltd make a popular line of surfboards. The business has two departments: cutting, finishing.

The following details are available for the costs of manufacturing surfboards.

- Each surfboard uses 6 kg of materials costing $8.20 per kg.
- All direct labour is paid at the rate of $16 per hour.

Monthly allocated indirect costs are as follows:

	Cutting department	Finishing department
	$	$
Supervisor's salary	3100	3400

The following indirect costs are to be apportioned between the two departments:

Cost (per month)	$
Factory rent	21000
Power charges	3500
Depreciation of machinery	5500

The following additional information is available:

	Cutting department	Finishing department
Floor space	600	800
Kilowatt hours per month	2400	1800
Machinery cost	$84000	$48000

	Labour hours available per month	Machine hours available per month
Cutting department	2200	3200
Finishing department	1800	300

b. Calculate the total indirect costs for each department.

c. Calculate the overhead absorption rates for each department.

Each surfboard requires 2.5 labour hours in the cutting department and 2.25 hours in the finishing department. The company's policy is to calculate the selling price of a surfboard by applying a mark-up of 50%.

In December 2018 the company received an order for 80 surfboards from Making Waves Ltd.

d. Calculate the amount charged by Superfsurf Ltd for the order from Making Waves Ltd.

Case Study 3: Inventory control

Cherelle owns a wholesale business selling electrical goods including microwave ovens. She uses the FIFO method to value her inventory.

a. Explain the difference between the LIFO and FIFO methods of inventory valuation.

During May 2018 the following information is available concerning microwave ovens type XC2.

Date		Units	Cost price $
1 May	Opening inventory	18	120
5 May	Purchases	10	122
10 May	Sales	12	
19 May	Purchases	20	123
24 May	Sales	24	
28 May	Purchases	15	124
30 May	Sales	12	

b. Complete the following table to show the value of inventory of microwave XC2.

Date	Purchases			Sales	Balance		
	Unit	Cost price ($)	Total value ($)	Units	Units	Cost price ($)	Total value ($)

c. Describe the effect on the profit for May 2018 of using FIFO instead of LIFO for valuing inventory.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

11 Accounting for the entrepreneur

Setting the scene

This chapter covers some other important aspects of setting up and running a business.

You will learn about how employees are paid in an organization, and how to make calculations of an individual's pay taking account of a variety of factors including tax deductions.

Accounting is not just about recording past events. A successful business also depends on thorough and detailed future planning, and accounting skills play a big part in this. In this chapter you will learn how to prepare cash forecasts and about sales and production budgets.

Finally, when setting up a business it is important that the owner and key staff have thought through just what it is the business is going to achieve: what it will do and how it will be managed. These ideas are presented in a business plan which is also introduced in this chapter.

Syllabus coverage

	Syllabus	Unit
1	List methods of payment	11.1
2	Identify basic source documents of the payroll	
3	Prepare a spreadsheet to arrive at net pay amounts after deductions	
4	Identify accounting software used for payroll	
5	Distinguish between voluntary and statutory deductions	
6	Calculate employees' earnings	
7	Prepare cash flow projections for a six-month period	11.2
8	Prepare sales and production budgets for a three-month period	
9	Use accounting knowledge and skills to prepare a simple business plan	

11.1 Payroll

Objectives

By the end of this unit you will be able to:

- calculate gross pay based on fixed rates, time rates, piece rates and commission
- identify and prepare source documents for calculating gross pay
- calculate income tax taking account of personal allowances and a basic rate of tax
- prepare a pay slip taking account of statutory and voluntary contributions
- prepare an extract from a payroll.

What is a pay slip?

Here is a typical pay slip:

Pay slip for Cynthia Brown		
Date: 31 May 2018		
	$	$
Gross pay for May		4 000
Deductions		
Income tax	320	
National insurance	160	
Pension fund	200	
		680
Net pay		3 320

You can see that although Cynthia earned $4 000 during the month, she took home much less than this (net pay) – just $3 320. This was because various deductions were made. In this unit, you are going to learn:

- how an individual's gross pay is calculated
- for what reasons deductions are made and how these are calculated
- how to prepare a pay slip
- how to prepare a business's payroll.

What is the payroll?

The **payroll** is the list of all a business's employees that shows details of the wages or salaries paid to each individual and how these amounts were calculated.

How is gross pay calculated?

Gross pay is the amount due to be paid by an employer in wages or salaries in return for work done before making any deductions. Wages are often paid weekly and can be paid in cash; salaries are usually paid monthly, either by cheque or directly into the employee's bank account.

Key terms

Payroll: the document that summarises details of each employee's pay on a week-by-week or month-by-month basis.

Gross pay: pay before any deductions.

Key terms

Fixed rate: pay that is an agreed amount for a period of time, for example an annual salary.

Time rate: pay that is based on the numbers of hours worked.

Piece rate: pay that is based on the work done in terms of products made, processes completed, etc.

Commission: pay that is dependent on a business's performance (often sales) and is expressed as a percentage of the performance indicator.

Gross pay can be calculated in a number of ways:

- **Fixed rate:** salaries, and sometimes wages, are usually an agreed amount for a year, when they may be reviewed with the possibility of a pay rise.
- **Time rates:** often wages are based on the hours worked, with an hourly rate agreed with the employer. Usually an employee is expected to work an agreed number of hours per week. However, sometimes employees may work "overtime" (more than the agreed hours) and be paid at a higher rate for these extra hours.
- **Piece rates:** wages can be based on the amount of work done, that is, the number of products made or operations carried out, with an agreed rate per product/operation. Employees who work faster therefore earn more than those who work more slowly.
- **Commission:** some individuals, particularly salespeople, are paid at a basic rate plus an additional amount that is dependent on the amount of sales they have achieved.

Here are some illustrations showing how to calculate gross earnings using these different methods.

Illustration 1

Fixed salary

Patrick's annual salary was agreed at $63 000 for the year ending 31 December Year 1.

In order to calculate Patrick's monthly gross earnings for Year 1, it is necessary to divide the annual salary by 12:

$$\frac{\$63\,000}{12} = \textbf{\$5 250 per month}$$

Patrick's employer agreed to a 5% pay rise for the year ending 31 December Year 2.

Patrick's salary for Year 2 will be:

$$\$63\,000 + (5\% \times \$63\,000) = \$63\,000 + \$3\,150 = \$66\,150$$

So Patrick's monthly gross earnings in Year 2 will be:

$$\frac{\$66\,150}{12} = \textbf{\$5512.50}$$

Illustration 2

Fixed wage

Quinlan earns $37 500 per annum. He is paid weekly.

Quinlan's weekly wage will be $\frac{\$37\,500}{52} = \textbf{\$721.15}$

Practice questions

1. Calculating gross pay based on fixed rate salaries and wages

Mala and Sharon both work for Golden Palm Jewellers Ltd.

During Year 1, Mala's salary was $85 000 per annum and Sharon's wage was $64 000 per annum. Both employees received a pay increase of 5% for Year 2.

Calculate Mala's monthly salary and Sharon's weekly wage for Years 1 and 2.

2. Calculating gross pay based on fixed rate salaries and wages

Kris and Rishi work for Bestprice Hotels Ltd.

During Year 1, Kris's salary was $112 000 per annum and Rishi's wage was $56 000 per annum. Both employees received a pay increase of 4% for Year 2.

Calculate Kris's monthly salary and Rishi's weekly wage for Years 1 and 2.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Illustration 3

Time rates

Rhonda works part time in a local restaurant. Rhonda is paid $24 per hour. During the week ended 7 May 2018, Rhonda was employed for 17 hours.

Rhonda will be paid a wage of 17 hours × $24 = **$408**.

Illustration 4

Time rates including overtime

Seeta is paid $30 per hour working in a luxury hotel. Seeta is contracted to work 35 hours per week. However, during the week ended 21 May 2018, she worked for 39 hours. Overtime is paid at time and a half.

Seeta will be paid 35 hours × $30 per week = $1 050 per week.

During the week ended 21 May 2018, she will be paid $1 050 plus overtime:

overtime payment = 4 hours × ($30 × 1.5) = 4 hours × $45 = $180

Seeta's wage for the week ended 21 May 2018 is $1 230.

Overtime rates vary. In the illustration, the basic rate was increased by 1.5 (described as "time and a half"). You may find overtime rates of, for example, "time and a quarter" (multiply the basic rate by 1.25).

Practice questions

3. Calculating gross pay using time rates

Seaview Manufacturing Ltd employs staff on the basis that they work for 40 hours per week.

The following information is available about three employees for the week ended 24 July 2018:

- Keith worked for 40 hours; his rate of pay is $32 per hour.
- Leela worked for 45 hours; her rate of pay is $28 per hour with overtime paid at time and a quarter.
- Michael worked for 46 hours; his rate of pay is $36 per hour with overtime paid at time and a half.

Calculate each employee's gross pay for the week ended 24 July 2018.

4. Calculating gross pay using time rates

Candy Restaurants employs staff on the basis that they work for 35 hours per week.

The following information is available for three of the employees for the week ended 16 October 2018:

- Geeta, a kitchen assistant, worked for 35 hours; she is paid $26 per hour.
- Henry, a waiter, worked for 41 hours; his rate of pay is $30 per hour with overtime paid at time and a quarter.
- Ishaka, a chef, worked for 44 hours; her rate of pay is $50 per hour with overtime paid at time and a half.

Calculate each employee's gross pay for the week ended 16 October 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Illustration 5

Piece rates

MXL Ltd manufactures computer printers.

There are several processes involved in assembling a printer. Employees are paid the following piece rates:

- Assembly process 1: $1.40 per printer
- Assembly process 2: $1.50 per printer
- Assembly process 3: $1.10 per printer.

Shane works part time in the assembly department. During the week ended 23 June 2018, Shane completed the following tasks:

- Assembly process 1: 30
- Assembly process 2: 50
- Assembly process 3: 60.

Shane will be paid the following.

		$
Process 1	30 × $1.40	42
Process 2	50 × $1.50	75
Process 3	60 × $1.10	66
Total		183

Illustration 6

Piece rates and minimum wage agreements

MXL Ltd (see Illustration 5) pays full-time staff piece rates, but also has a minimum wage agreement whereby full-time staff are paid at least $800 per week.

Tara is a full-time employee. During the week ended 26 August 2018, Tara completed the following tasks:

- Assembly process 1: 100
- Assembly process 2: 240
- Assembly process 3: 220.

Based on piece rates, Tara would be paid the following.

		$
Process 1	100 × $1.40	140
Process 2	240 × $1.50	360
Process 3	220 × $1.10	242
Total		742

The minimum wage agreement will be applied to Tara during this week, so she will earn $800.

Practice questions

5. Calculating gross pay using piece rates

Albion Sports Ltd manufactures windsurfing equipment, including surfboards, sails and masts. The following information is available for two employees (Francis and Sweeta) who worked in the assembly department during the week ended 18 March 2018.

Piece rates per product are:

	$
Surfboards	3.00
Surfsails	4.00
Surfmasts	3.50

Francis and Sweeta completed the following products.

	Francis			Sweeta		
	Boards	Sails	Masts	Boards	Sails	Masts
Monday	10	10	10	8	12	14
Tuesday	12	8	12	10	10	16
Wednesday	15	6	14	12	8	12
Thursday	12	12	6	16	6	12
Friday	11	15	11	9	11	14

a. Calculate each employee's gross pay for the week ended 18 March 2018.

The directors of Albion Sports Ltd are considering the introduction of a minimum weekly wage agreement. This would amount to $575 per week.

b. If the minimum wage agreement was already operating, how much would Francis and Sweeta have been paid for the work completed during the week ended 18 March 2018?

6. Calculating gross pay using piece rates

Robin and Stacy work on the production line for Crestaholdings Ltd. This company makes three different products, A, B and C, and production workers are paid piece rates.

The following information is available about the week ended 22 April 2018.

Piece rates per product are:

	$
1	7
2	6
3	8

Robin and Stacy completed the following products.

	Robin			Stacy		
	A	B	C	A	B	C
Monday	8	6	4	10	3	4
Tuesday	6	6	9	3	9	5
Wednesday	2	12	3	8	6	7
Thursday	7	4	7	6	9	4
Friday	5	11	5	8	4	5

a. Calculate each employee's gross pay for the week ended 22 April 2018.

The directors of Crestaholdings Ltd will be introducing a minimum weekly wage of $645 per week.

b. If the minimum wage agreement was already operating, how much would Robin and Stacy have been paid for the work completed during the week ended 22 April 2018?

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Piece rates are often used where it is important to encourage staff to work as quickly as possible. Of course, the result of this could be that some work will not be of the required quality. So in some cases, piece rates are only given for work that passes a quality check.

Illustration 7

Piece rates with quality checks

Uwanna works part-time for MXL Ltd (see Illustrations 5 and 6). During the week ended 16 July 2018, she completed the following tasks:

- Assembly process 1: 35
- Assembly process 2: 72
- Assembly process 3: 14.

However, quality checks meant that the following items were rejected:

- Assembly process 1: 3
- Assembly process 2: 7
- Assembly process 3: 1.

Based on piece rates for the accepted items, Uwanna will be paid the following:

		$
Process 1	(35 − 3) × $1.40	44.80
Process 2	(72 − 7) × $1.50	97.50
Process 3	(14 − 1) × $1.10	14.30
Total		156.60

Practice questions

7. Calculating piece rates where there is quality control

Kimberly is paid a piece rate of $1.20 for each item that is passed by a quality check. During a recent week, Kimberly's work record was as follows.

	Completed items	Items rejected
Monday	154	6
Tuesday	172	11
Wednesday	164	7
Thursday	153	2
Friday	175	9

Calculate Kimberly's gross pay for this week.

8. Calculating piece rates where there is quality control

Walter is paid a piece rate of $0.35 for each item that is passed by a quality check. During a recent week, Walter's work record was as follows.

	Completed items	Items rejected
Monday	372	14
Tuesday	406	11
Wednesday	395	15
Thursday	403	17
Friday	374	9

Calculate Walter's gross pay for this week.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Illustration 8

Commission

Ulrick works in a department store. He is paid $3 000 per month but is also entitled to a commission of 1.5% based on his department's monthly sales.

His department's monthly sales were.

	$
August 2018	32 000
September 2018	27 400

Ulrick will be paid as follows.

	Basic salary	Commission	Total
	$	$	$
August 2018	3000	1.5% × $32000 = $480	3480
September 2018	3000	1.5% × $27400 = $411	3411

Practice questions

9. Commission and gross pay

Yvonne and Zamran are employed by Horrad's Department Store. Yvonne works in the shoe department and Zamran works in the technology department. Both employees earn a basic salary of $3400 per month. In addition, they are paid a commission of 1% of the amount by which the sales of their department exceed $40000 per month.

Sales for each department for two recent months were as follows.

	Shoe department	Technology department
	$	$
August 2018	44000	38700
September 2018	39500	49200

Calculate Yvonne's and Zamran's gross pay for the months of August and September 2018.

10. Commission and gross pay

Multilinks Ltd produces kitchen equipment. Jamal is the production manager of the department that produces dishwashers and Kersha is the production manager of the department that produces washing machines. Jamal's salary is $4800 per month and Kersha's salary is $5300 per month. In addition, both managers earn a 2% commission based on the profits made by their departments in excess of $30000 per month.

Profits for two recent months were as follows.

	Dishwasher department	Washing machine department
	$	$
April 2018	33000	36000
May 2018	32000	29000

Calculate Jamal's and Kersha's gross pay for the months of April and May 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Source documents for pay calculations

In order to calculate an individual's pay, different source documents are used, depending on how the individual is paid.

Fixed amount salaries/wages

The individual's personnel record will normally contain details from the employment contract concerning pay rates. These records should also note any voluntary deductions (see below) to which the employee has agreed.

Time rates

Where employees are paid by the hour, it may be necessary to use systems that carefully record when each employee arrives for work and when they leave. In the most basic situation, an employee might just sign in and sign out. In larger organizations, employees may be required to "clock in" and "clock out". This means that the employee has a **clock card** that has to be inserted into a time recorder, a machine that automatically stamps the time on to the card. The card can then be used in the wages office to calculate the hours the employee has been on the premises. It can also be used to raise awareness of absence or lateness.

Key term

Clock card: a document that gives details of the number of hours an employee has worked, which is obtained from the use of a special item of equipment: a clock card machine or time recorder.

Notes:

- If you check the total time worked each weekday, you will notice that the lunch hour (from 12.30 to 1.30) is considered part of the employee's working day for which they are paid.
- It is important that the clock cards provide separate information about normal hours and overtime hours, because the rate of pay will be different for each of these categories.

Illustration 9

An employee's clock card

CLOCK CARD								
HALCYON & SONS LTD								
CLOCK CARD NUMBER			47321		WEEK ENDING		18 February 2018	
EMPLOYEES NAME			Henry Williams					
	MORNING		AFTERNOON		EVENING		HOURS WORKED	
	IN	OUT	IN	OUT	IN	OUT	Normal	Overtime
Monday	8.00	12.30	1.30	4.03			8	
Tuesday	8.00	12.30	1.30	4.00			8	
Wednesday	8.00	12.30	1.30	4.05	6.00	8.00	8	2
Thursday	8.00	12.30	1.30	5.00			8	1
Friday	8.00	12.30	1.30	4.00			8	
Saturday	9.00	12.30						3.5
Sunday	9.00	12.00						3
						Totals	40	9.5

Practice questions

11. Calculating gross pay using a clock card as source document

Latoya is employed by Southland Shores Ltd. She is paid $32 per hour for an 8-hour day. Weekday overtime is paid at time and a quarter; weekend overtime is paid at time and a half. Weekday lunch hours are treated as time on the job.

An extract from Latoya's clock card for Week 33 is shown below.

	MORNING		AFTERNOON		EVENING	
	IN	OUT	IN	OUT	IN	OUT
Monday	8.00	12.00	1.00	4.00		
Tuesday	8.00	12.00	1.00	4.00	5.00	7.00
Wednesday	8.00	12.00	1.00	4.00		
Thursday	8.00	12.00	1.00	4.00	6.00	9.00
Friday	8.00	12.00	1.00	4.00		
Saturday			2.00	5.00		
Sunday	10.00	12.00				

Calculate Latoya's gross pay for Week 33.

12. Calculating gross pay using a clock card as source document

Bradley is employed by BTP Ltd. He is paid $30 per hour for an 8-hour day. Weekday overtime is paid at time and a half; weekend overtime is paid at time and three-quarters. Weekday lunch hours are treated as time on the job.

An extract from Bradley's clock card for Week 17 is shown below.

	MORNING		AFTERNOON		EVENING	
	IN	OUT	IN	OUT	IN	OUT
Monday	8.30	12.30	1.30	4.30	5.30	7.00
Tuesday	8.30	12.30	1.30	4.30		
Wednesday	8.30	12.30	1.30	4.30	5.30	9.30
Thursday	8.30	12.30	1.30	4.30		
Friday	8.30	12.30	1.30	4.30		
Saturday	9.30	12.00				
Sunday			2.30	4.30		

Calculate Bradley's gross pay for Week 17.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key term

Time sheet: a document that records the hours worked by an employee who works off site.

In certain situations, some employees may have to work away from the business premises, for example delivery drivers, maintenance and repair staff, engineers, etc. These employees will normally be required to complete **time sheets**, which record details of the work done and the time taken. A time sheet is usually countersigned by the customer and the individual's line manager.

Illustration 10

An employee's time sheet

PORTSTOWN COMPUTER SUPPORT LTD			
TIME SHEET			
JOB NUMBER	**3246B**	DATE	**14-Aug-18**
TECHNICIAN	**Stacy Taylor**		
TIME STARTED	9.30	TIME ENDED	1.00
CLIENT	**LTB Finance Co Ltd Portstown branch**		
Summary: work carried out			
Travel time from home to client: 30 minutes			
Investigation of problem and system checks: 1 hour 45 minutes			
System problems overcome: 1 hour			
Monitoring that system in working order: 15 minutes			
Stacy Taylor Employee to sign	Alan Parker Customer to sign	Julie Edwards Line manager to sign	

Stacy Taylor works for a company that provides technical support to businesses that are experiencing problems with their IT systems. Here is a time sheet completed by Stacy after she visited the LTB Finance Co. Ltd branch office in Portstown, where their computer system had crashed.

This document provides evidence that Stacy worked for 3.5 hours.

Piece rates

Key term

Piecework ticket: a document that records the number of items that quality control has passed for payment using piece rates.

Where employees are paid for the products made or processes completed, the source document will be a production record card of some kind, often called a **piecework ticket**, which will normally record a week's activity. The ticket will show how many items were made each day and how many items were accepted.

Illustration 11

A piecework ticket

Murray works in a factory that produces skateboards. His piecework ticket for the week ended 23 September 2018 was as follows:

SUPAGLIDE LTD				
PRODUCTION RECORD CARD				
Employee	**Murray Evans**			
Week No.	**38**	Week ending	**21-Sep-18**	
	No. produced	*No. rejected*	*No. accepted*	*Signed*
Monday	25	2	23	S Pulchan
Tuesday	27	1	26	S Pulchan
Wednesday	28	2	26	S Pulchan
Thursday	29	3	26	S Pulchan
Friday	27	3	24	S Pulchan

So Murray was due to be paid for making 125 skateboards (the total number of items accepted).

Practice questions

13. Calculating gross pay using a production record card as a source document

Louise Johnson works in the cutting department of Rainbow Fashions Ltd, which produces high-quality garments. Louise is paid $11 for each garment that passes the quality control processes. The company has a weekly minimum wage agreement of $880.

Louise's piecework tickets for two recent weeks are shown below.

RAINBOW FASHIONS LTD				
PRODUCTION RECORD CARD				
Employee	Louise Johnson			
Week No.	**6**	Week ending	**9-Feb-18**	
	No. produced	*No. rejected*	*No. accepted*	*Signed*
Monday	18	3		
Tuesday	14	2		
Wednesday	15	1		
Thursday	17	4		
Friday	23	5		

RAINBOW FASHIONS LTD				
PRODUCTION RECORD CARD				
Employee	Louise Johnson			
Week No.	**7**	Week ending	**16-Feb-18**	
	No. produced	*No. rejected*	*No. accepted*	*Signed*
Monday	15	1		
Tuesday	18	3		
Wednesday	22	3		
Thursday	24	2		
Friday	19	1		

Calculate Louise's gross pay for each of the weeks ended 9 and 16 February 2018.

14. Calculating gross pay using a production record card as a source document

Bobby Campbell is employed by Causeway Engineering Ltd, manufacturers of precision instruments. Bobby is paid $3 for each product that passes the quality control checks. The company has a minimum weekly wage agreement of $800.

Here are Bobby's piecework tickets for two recent weeks.

CAUSEWAY ENGINEERING LTD				
PIECEWORK TICKET				
Employee	Bobby Campbell			
Week No.	**24**	Week ending	**8-Jun-18**	
	No. produced	*No. rejected*	*No. accepted*	*Signed*
Monday	55	6		
Tuesday	60	5		
Wednesday	62	3		
Thursday	58	7		
Friday	59	2		

CAUSEWAY ENGINEERING LTD				
PIECEWORK TICKET				
Employee	Bobby Campbell			
Week No.	**25**	Week ending	**15-Jun-18**	
	No. produced	*No. rejected*	*No. accepted*	*Signed*
Monday	59	5		
Tuesday	55	7		
Wednesday	61	5		
Thursday	59	3		
Friday	56	6		

Calculate Bobby's gross pay for each of the weeks ended 8 and 15 June 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

How is net pay calculated?

In this section, you are going to learn about deductions from gross pay. The examples given should be taken as a general guide only: each Caribbean state has its own regulations, and uses different rates when calculating deductions, and these are all subject to change from one year to the next. You may like to investigate what deductions could apply to you or to members of your family.

Income tax

Most individuals have to pay income tax on their gross earnings. Income tax is an example of a **statutory deduction**; this means that it is a legal requirement. Income tax rules can be complicated, but the basic process is often as follows:

- Personal allowance: no income tax is charged on some of the gross earnings. For example, the first $10 000 of earnings could be tax free.
- Taxable pay: gross pay less the personal allowance gives what is called taxable pay. Income tax will be calculated on taxable pay at a particular rate, say 20%.

Key term

Statutory deduction: an amount that an employer is legally required to take from an employee's gross pay.

Illustration 12

Calculating an employee's annual net pay taking account of income tax

Lisa works for Island Promotions Ltd, an advertising agency. In Year 1, her annual salary was $45 000. In Year 2, she was promoted and her annual salary was $50 000.

The following information is available about the income tax regulations that applied to Lisa.

	Personal allowance	Tax rate
Year 1	$10 000	20%
Year 2	$12 500	22%

With this information, it is possible to calculate Lisa's net pay for Year 1 and Year 2.

Year 1

	$
Gross pay	45 000
Less personal allowance	10 000
Taxable pay	35 000

So Lisa's income tax will be 20% × $35 000 = $7 000.

Her net pay for Year 1 will be $45 000 – $7 000 = **$38 000**.

Year 2

	$
Gross pay	50 000
Less personal allowance	12 500
Taxable pay	37 500

So Lisa's income tax will be 22% × $37 500 = $8 250.

Her net pay for Year 2 will be $50 000 – $8 250 = **$41 750**.

Practice questions

15. Calculating net pay taking account of income tax

Omare works for Victory Finance Ltd. In Year 1, his annual salary was $62 000. In Year 2, he was awarded a pay rise and his annual salary was $65 000.

The following information is available about the income tax regulations that applied to Omare.

	Personal allowance	Tax rate
Year 1	$18 000	22%
Year 2	$19 500	20%

Calculate Omare's net pay for Years 1 and 2.

16. Calculating net pay taking account of income tax

Cindy works for Jubilee Retail Stores Ltd. In Year 1, her annual salary was $47 000. In Year 2, she was promoted and her annual salary was $55 000.

The following information is available about the income tax regulations that applied to Cindy.

	Personal allowance	Tax rate
Year 1	$12 000	18%
Year 2	$13 000	20%

Calculate Cindy's net pay for Year 1 and Year 2.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Other compulsory deductions

Many individuals also have deductions made for the following:

- National insurance (social security) contributions: this deduction is made to provide the funds to pay state retirement pensions, disability benefits, unemployment benefits, etc. To illustrate this deduction, it will be assumed that it is calculated as a percentage of gross pay (for example, 4% of gross pay).

- Pension plan contributions: some employers require employees to contribute to a scheme that will ensure that when they retire they are entitled to receive a pension from their employer as well as from the state. To illustrate this deduction, it will be assumed that it is calculated as a percentage of gross pay (for example, 3% of gross pay).

Illustration 13

Calculating an employee's annual net pay taking account of compulsory deductions

Joshua's annual salary is $80 000. For the year ended 31 December 2018, the personal allowance is $16 000 and the income tax rate is 20%. In addition, deductions are to be made for national insurance/social security of 5% of gross pay, and for a pension plan contribution of 4% of gross pay.

Here is a calculation of Joshua's net pay for the year ended 31 December 2018.

Step 1: Calculate taxable pay.

	$
Gross pay	80 000
Less personal allowance	16 000
Taxable pay	64 000

Step 2: Calculate income tax.

Income tax is 20% × taxable pay $64 000 = $12 800.

Step 3: Calculate all deductions, and hence net pay.

Joshua		
	$	$
Gross pay		80 000
Deductions:		
Income tax	12 800	
National insurance/social security (5% × gross pay = 5% × $80 000)	4 000	
Pension fund (4% × gross pay = 4% × $80 000)	3 200	
		20 000
Net pay		60 000

Practice questions

17. Calculating net pay taking account of compulsory deductions

Renea's annual salary is $90 000. For the year ended 31 December 2018, income tax regulations were that there was a personal allowance of $16 000 and a tax rate of 22%. In addition, deductions were to be made for national insurance/social security of 4% of gross pay and for an employer's pension plan contribution of 5% of gross pay.

Calculate Renea's net pay for the year ended 31 December 2018.

18. Calculating net pay taking account of compulsory deductions

Shivan's annual salary is $74 000. For the year ended 31 December 2018, income tax regulations were that there was a personal allowance of $18 000 and a tax rate of 29%. In addition, deductions were to be made for national insurance/social security of 5% of gross pay and for an employer's pension plan contribution of 3% of gross pay.

Calculate Shivan's net pay for the year ended 31 December 2018.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key term

Voluntary deduction: an amount that an employee requests the employer to take from his or her pay.

Voluntary deductions

In some organizations, employees can request that deductions are made to meet the needs of the individual concerned; these are called **voluntary deductions**. Here are some examples:

- membership of organization's sports club
- donation to a favourite charity
- membership of a trade union
- contribution to a health scheme
- life insurance contribution
- contributions to credit unions or saving schemes.

These deductions are likely to be a fixed amount per week or per month.

Illustration 14

Calculating an employee's weekly take-home pay

Sharla works a 40-hour week and is paid $40 per hour. Overtime is paid at time and a half.

She pays income tax at the rate of 20% on any earnings above $450 per week. In addition, national insurance contributions are 5% of gross pay. Sharla pays $10 per week for membership of the employer's sports and social club, and $15 per week into a health scheme.

Last week (week 32) Sharla worked for 48 hours.

Step 1: Calculate gross pay.

40 hours × $40 per hour = $1 600

8 hours' overtime × 1.5 × $40 per hour = $480

Gross pay = $2 080

Step 2: Calculate income tax.

Income tax = 20% × taxable pay ($2 080 – $450 personal allowance)

= 20% × $1 630 = $326

Step 3: Calculate all deductions, and hence net pay.

Sharla's pay slip will show the following.

Pay slip: Sharla for Week 32		
	$	$
Gross pay		2 080
Deductions:		
Income tax	326	
National insurance/social security (5% × gross pay = 5% × $2 080)	104	
Sports and social club	10	
Health scheme	15	
		455
Net pay		1 625

Practice questions

19. Calculating weekly take-home pay

Xavier works a 40-hour week and is paid $36 per hour. Overtime is paid at time and a quarter.

He pays income tax at the rate of 20% on any earnings above $650 per week. In addition, national insurance contributions are 3% of gross pay. Xavier pays $25 per week in contributions to a health scheme and $15 per week to a credit union.

Last week, Xavier worked for 46 hours.

Prepare Xavier's pay slip for last week.

20. Calculating weekly take-home pay

Euzhan works a 35-hour week and is paid $32 per hour. Overtime is paid at time and a half.

She pays income tax at the rate of 22% on any earnings above $520 per week. In addition, national insurance contributions are 4% of gross pay.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Euzhan pays $22 per week in contributions to a trade union and $16 per week for membership of her employer's sports club.

Last week Euzhan worked for 42 hours.

Prepare Euzhan's pay slip for last week.

Payroll software

Many businesses now use specialised software for their payroll. In addition to the normal advantages of software programs of speed and accuracy of calculation, payroll software has additional benefits. Most software packages will:

- generate payslips automatically
- calculate bonuses and holiday pay in addition to the usual wages and salary details
- apply current tax regulations automatically
- provide forecasts of future staffing costs for use in planning and budgeting.

Tip

Examples of payroll software include: Gusto, OnPay, Xero, Sage Intacct, Intuit Payroll, Paychex, Paycom, etc.

For some smaller businesses it is not feasible to use payroll software because of the costs involved and it may also be difficult to find staff who have the skills necessary to use the software. Smaller businesses, therefore, tend to use manual systems, which can be time consuming and can lead to inaccuracies.

Completing the payroll

The payroll is the document that summarises for each employee all the key facts that lead to calculation of net pay. The payroll could be kept manually or perhaps using a spreadsheet. However, except for small organizations, it is more likely that a special software package will be used that is integrated with the accounting software program, such as Sage, Quick Books and Peach Tree.

Illustration 15

Columns in the payroll

Here is a typical template for a payroll.

PAYROLL											
Week number											
Employee	Hourly rate $	Normal hours	Overtime hours	Normal pay $	Overtime pay $	Gross pay $	Income tax $	National insurance $	Club $	Health scheme $	Net pay $

Here is the template completed using the information given in Illustration 14 above.

PAYROLL											
Week number						32					
Employee	Hourly rate $	Normal hours	Overtime hours	Normal pay $	Overtime pay $	Gross pay $	Income tax $	National insurance $	Club $	Health scheme $	Net pay $
Sharla	40	40	8	1600	480	2080	326	104	10	15	1625

Practice questions

21. Completing the payroll

Complete the payroll template below for Xavier in Question 19.

Week number											
Employee	Hourly rate $	Normal hours	Overtime Hours	Normal pay $	Overtime pay $	Gross pay $	Income tax $	National insurance $	Health scheme $	Credit union $	Net pay $

22. Completing the payroll

Complete the payroll template below for Euzhan in Question 20.

Week number											
Employee	Hourly rate $	Normal hours	Overtime Hours	Normal pay $	Overtime pay $	Gross pay $	Income tax $	National insurance $	Trade union $	Sports club $	Net pay $

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

11.2 Forecasting and preparing a business plan

Objectives

By the end of this unit you will be able to:

- prepare a cash flow projection within a six-month period
- prepare a sales budget for a three-month period
- prepare a production budget for a three-month period
- prepare a simple business plan.

Forwarding planning

Forward planning is an important part of managing a business because it helps ensure that:

- the business's goals can be achieved
- the right resources are available at the right time
- resources are used efficiently.

With plans in place, it is possible to compare actual events with what was expected. This will enable owners and managers to investigate any unfavourable outcomes leading to action plans to overcome any negative results.

Key terms

Cash flows: total money transferred into and out of a business.

Cash flow projection: a forecast showing how cash will be generated and disposed of by an organization.

Cash flow projections

Forecasting **cash flows** is a key element of forward planning. Predicting cash shortages will enable arrangements to be put in place with the business's bank for an overdraft facility. Predicting cash surpluses will enable plans to be put in place to make better use of the excess funds. As you know, a major cause of business failure is liquidity problems, so preparing a cash flow projection can help avert difficulties.

To prepare a **cash flow projection** is it necessary to forecast future receipts of cash (inflows) and future payments (outflows), examples include:

Inflows

- Cash sales
- Receipts from credit customers
- Capital introduced by the owner
- Grants

and also proceeds from the sale of non-current assets, loans, other revenues, etc.

Outflows

- Cash purchases
- Payments to suppliers
- Expense payments
- Owner's drawings

and also purchases of non-current assets, repayments of loans, etc.

A cash flow projection will show total inflows, total outflows, net in/out flows, opening and closing cash balances for each month.

There are various ways of setting out a projection. Here is one example:

	Month 1	Month 2	Month 3
	$	$	$
Cash inflows			
xxxxxxxxxx	xxx	xxx	xxx
xxxxxxxxxx	xxx	xxx	xxx
Total inflows	xxx	xxx	xxx
Cash outflows			
xxxxxxxxxx	xxx	xxx	xxx
xxxxxxxxxx	xxx	xxx	xxx
Total outflows	xxx	xxx	xxx
Net inflow/(outflow)	xxx	(xxx)	xxx
Cash balances			
Opening	xxx	xxx	(xxx)
Closing	xxx	(xxx)	xxx

Notes:

- Negative figures are shown in brackets.
- If cash outflows exceed cash inflows there is a negative net outflow.
- At the end of Month 2 there is a negative cash closing balance, so Month 3 opens with this negative cash balance.

Illustration 16

Preparing a cash flow projection

Katherine owns a furniture store called "Homechoice". She prepares six-monthly cash projections.

She has provided the following forecasts for each of the six months leading up to 30 June 2019:

	2019					
	January	February	March	April	May	June
	$	$	$	$	$	$
Cash sales	3600	3800	3900	3400	3200	3000
Receipts from credit customers	6300	6000	6500	6100	6600	6200
Payments to credit suppliers	4200	4300	4800	4700	4600	4100
Wages	2900	2800	2700	2900	2700	2800
Utilities	600	600	700	700	900	800
Other running costs	1900	2200	3400	2500	1800	1300

On 1 January 2019 the business is forecast to have a bank balance of $1400.

The cash flow projection is:

Homechoice Cash flow projection for each of the six months to 30 June 2019						
	January	February	March	April	May	June
	$	$	$	$	$	$
Cash inflows						
Cash sales	3600	3800	3900	3400	3200	3000
Receipts from credit customers	6300	6000	6500	6100	6900	6200
Total inflows	9900	9800	10400	9500	10100	9200
Cash outflows						
Payments to credit suppliers	4200	4300	4800	4700	4200	4100
Wages	2900	2800	2700	2900	2700	2800
Utilities	600	600	700	700	500	800
Other running costs	1900	2200	3400	2500	1800	1300
Total outflows	9600	9900	11600	10800	9200	9000
Net inflow/ (outflow)	300	(100)	(1200)	(1300)	900	200
Cash balances						
Opening	1400	1700	1600	400	(900)	0
Closing	1700	1600	400	(900)	0	200

The cash flow projection will help Katherine identify that she will probably need to arrange a bank overdraft facility for April and May 2019.

The cash flow projection might prompt Katherine to re-plan certain payments so that she can avoid the need for an overdraft.

Practice questions

23. Preparing a cash flow projection

Jarel prepares cash flow projections for his business, "Parkside Trader". He has supplied the following forecasts for the six months ending 30 September 2019.

	2019					
	April	May	June	July	August	September
	$	$	$	$	$	$
Cash sales	5 900	5 500	5 800	5 700	6 000	5 900
Additional capital					1 800	
Payments to credit suppliers	2 800	2 900	3 200	2 900	3 200	3 100
Wages	1 800	1 800	2 000	2 000	1 900	1 800
Rent	700	700	700	900	900	900
General expenses	400	500	400	600	700	500

Jarel forecasts that his business's bank balance will be $900 on 1 April 2019.

Prepare a cash flow projection for each of the six months ending 30 September 2019.

24. Preparing a cash flow projection

Rosa prepares cash flow projections for her business, "Island Gems". She has supplied the following forecasts for the six months ending 31 August 2019.

	2019					
	March	April	May	June	July	August
	$	$	$	$	$	$
Cash sales	1 100	900	900	1 000	1 200	1 100
Receipts from credit customers	2 500	2 400	2 000	1 900	1 900	2 600
Payments to credit suppliers	1 200	1 400	1 100	1 000	1 300	1 300
Wages	900	900	900	1 100	1 100	1 100
Drawings	500	500	500	800	700	500
Utilities	300	200	600	400	600	300

Rosa forecasts that her business's bank balance will be $100 on 1 March 2019.

Prepare a cash flow projection for each of the six months ending 31 August 2019.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key term

Sales budget: an itemization of a business's sales expectations for a future period, in both units and dollars.

Preparing sales budgets

A **sales budget** is a prediction of the number of units that a business will sell and their value for a future period. Normally the budget is prepared on a month-by-month basis. The sales budget is often the single most important key to future planning because from it derive so many aspects of a business's future: cash inflows, purchasing or production requirements, for example.

Illustration 17

Preparing a sales budget

Dylan manufactures a single product. He forecasts that sales for each of the three months ended 31 May 2019 will be as follows:

2019	Units
March	420
April	440
May	400

The selling price of the product is $60 each.

Here is the sales budget:

Sales budget for Dylan for the three months ending 31 May 2019			
	March	April	May
Sales units	420	440	400
Sales value	$25 200	$26 400	$24 000

Practice questions

25. Preparing a sales budget

Zina has prepared the following forecasts for her business, Galaxy Products. The forecasts are for each of the three months ending 30 November 2019.

2019	units
September	180
October	200
November	240

The selling price of the product during the budget period will be $35 per unit for the first two months, changing to $37 per unit in November 2019.

Prepare a sales budget for each of the three months ending 30 November 2019.

26. Preparing a sales budget

Carl owns a small manufacturing business. He has been preparing a sales budget for each of the three months ending 30 June 2019.

He estimates that units sales will be 10% higher than those for the same period in 2018. Sales figures for each of the three months ended 30 June 2018 were:

2018	Units
April	4 600
May	5 200
June	5 300

Carl forecasts that the selling price per unit for the budget period will be $8 per unit.

Prepare a sales budget for each of the three months ending 30 June 2019.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Preparing production budgets

A **production budget** sets out the number of units to be produced in order to meet expected sales. It takes account of inventory levels of finished goods. This budget is of great importance because all production costs are determined from its results.

The usual format for a production budget is:

	units
Sales	xxx
Less opening inventory of finished goods	(xx)
Add closing inventory of finished goods	xx
Production	xxx

Key term

Production budget: a forecast of the units of products that must be manufactured based on information from the sales budget and taking account of movements in inventory of finished goods.

Illustration 18

Preparing a production budget

Dylan (see Illustration 17) has also prepared a production budget for each of the three months ending 31 May 2019. Dylan's policy is to maintain inventory levels at one-quarter of the sales for the next month. (Sales for June 2019 are forecast to be 460 units.)

Production budget for Dylan for the three months ending 31 May 2019			
	March	April	May
	Units	Units	Units
Sales units	420	440	400
Opening inventory	(105)	(110)	(100)
Closing inventory	110	100	115
Production	425	430	415

Tip

Don't forget that a production budget shows units. It is a common error to show values in dollars.

Practice questions

27. Preparing a production budget

Nyla has been preparing a production budget for each of the three months ended 31 July 2019.

She forecasts that sales will be:

2019	units
May	1500
June	1600
July	1800

Her policy is to maintain a closing inventory sufficient to cover 20% of the next period's sales. As a result there will be an inventory of 300 units on 1 May 2019. Nyla forecasts sales of 1900 units for August 2019.

Prepare a production budget for each of the three months ended 31 July 2019.

28. Preparing a production budget

Ashani manufactures a component used in the production of laptop computers.

Forecast sales of the component for each of the first three quarters of 2019 are as follows:

2019	units
Quarter 1: January – March	8200
Quarter 2: April – June	7500
Quarter 3: July – September	9300

His policy is to maintain a closing inventory sufficient to cover 5% of the next quarter's sales.

The inventory on 1 January 2019 will be 410 units. Ashani forecasts sales of 8800 units for the last quarter of 2019.

Prepare a production budget for each of the Quarters 1–3 of 2019.

Tip

Once you have completed these questions you can check your answers online at: www.oxfordsecondary.com/9780198437260

Key term

Business plan: a document that sets out a business's objectives and strategies for achieving them for the benefit of interested parties.

Preparing a simple business plan

A **business plan** is a document that sets out the key ideas behind a proposed new business venture. It is an important document because it should ensure:

- everyone involved is clear about the main objectives of the new business and so is focussed on achieving those objectives

- everyone has thought through the feasibility of the business by considering any problems that are likely to arise and how they might be overcome
- it attracts potential investors in the business.

A good plan makes it absolutely clear what the business will do and how it will be successful (i.e. make a profit).

The main sections of a business plan are:

Executive summary

A statement about what the business will do (the products or services which will be offered), how it will make money, how it will attract customers and the amount of finance needed.

Company background

This will include a description of the skills, experience and qualifications of the key personnel.

Marketing plan

The marketing plan sets out answers to the following questions:

- Who are the potential customers?
- Is this market likely to grow and how quickly?

Marketing analysis

A statement about competitors, their market share, and the plans to ensure customers will be attracted away from the competition to the new business.

Financial plan

A financial plan will include:

- a statement about the business's predicted revenue, costs (wages, rent, utilities, etc.) and its main suppliers
- capital requirements
- a detailed, three-year forecast of profits, cash flows, etc.

Illustration 19

A simple business plan

Carl and Sabina have decided to go into business selling local produce at a busy crossroads located near the town of Palmhaven. They need to present a business plan to a local bank to support an application for a loan. They have drafted the following simple business plan:

Executive summary

We are Carl and Sabina and we plan to open a roadside stall selling fresh local produce. Our business will be called A1 Supplies. We will operate as a partnership.

Our business will obtain fresh supplies early each day from local producers which we will sell at the roadside at a busy crossroads just outside Palmhaven. The stall will be open for 7 hours each day Monday–Saturday. All trading is planned to be on a cash basis. We will require a capital investment of $20 000 to cover the purchase of a vehicle for carrying supplies. We plan to advertise our business at the roadside but also by advertising more widely in local community centres.

Company background

We have both worked in retailing for a number of years and have developed goods skills in customer relations. Sabina also has some qualifications in finance and will be able to keep detailed accounting records, though we will need to employ an accountant in due course to make tax assessments. Carl also has some experience in agriculture, having worked with several local suppliers over recent years.

Marketing plan and analysis

Most of our customers will be passing motorists, but we will also be accessible to local residents who can access our location on foot. The crossroads is busy throughout the day with tourists, but also local residents travelling to and from work. There is a large area available for motorists to park safely and conveniently. A survey we conducted among local residents confirmed the need for a supplier of local produce in the area, as the nearest retailer is some 3 miles away.

There are similar businesses, which are very successful, located on our island. However, our nearest competitor will be 7 miles away. We are aware that there are plans to develop the tourist industry very near to our location and there are also plans to build more homes locally. We are confident therefore that our potential market will grow in the future. Our suppliers are offering favourable prices because we will collect all the produce and will also pay cash.

Financial plan

Our initial capital requirements are $25 000. This will be sufficient for us to purchase a delivery vehicle, stall, opening inventory and cash float. We plan to contribute $10 000 each from personal savings and will apply for a bank loan of $5 000. The partnership agreement will be to share profits and losses equally.

Our three-year financial forecasts are as follows:

	Year 1	Year 2	Year 3
	$	$	$
Revenue	120 000	144 000	168 000
Cost of sales	40 000	48 000	56 000
Gross profit	80 000	96 000	112 000
Operating expenses	20 000	23 000	26 000
Depreciation	4 000	4 000	4 000
Net profit	56 000	69 000	82 000

Cash flow forecasts for the first three years are:

	Year 1	Year 2	Year 3
	$	$	$
Receipts			
Capital introduced	20 000		
Bank loan	5 000		
Sales	120 000	144 000	168 000
Total receipts	145 000	144 000	168 000
Payments			
Delivery vehicle	18 000		
Stall	3 000		
Suppliers	40 000	48 000	56 000
Operating expenses	20 000	23 000	26 000
Loan repayments		2 500	2 500
Drawings	60 000	70 000	70 000
Total payments	141 000	143 500	154 500
Opening balance	–	4 000	4 500
Net inflow/outflow	4 000	500	13 500
Closing balance	4 000	4 500	18 000

Develop your exam skills

PAPER 1

1. Which of the following is a means of calculating gross pay?
   - I fixed rate
   - II piece rate
   - III commission

   A I and II only
   B I and III only
   C II and III only
   D I, II and III

2. An employee is paid $20 an hour with overtime paid at time and a half. Employees are expected to work a 35-hour week.

   Calculate the employee's gross pay for a week in which he worked 40 hours.
   A $825
   B $850
   C $925
   D $950

3. A businessman prepares cash flow projections. Which of the following should not be included?
   A cash sales
   B depreciation
   C grants
   D payments to suppliers

4. A manager is preparing a production budget. Closing inventory is always based on 10% of the following month's sales. Units cost $2 each to produce.

   The following forecasts are available for each of the next three months:

	Month 1	Month 2	Month 3
Sales (units)	600	700	800

   What entry should be made in the production budget for opening inventory for Month 2?
   A 70 units
   B 80 units
   C $140
   D $160

5. Which of the following should be included in a business plan?
   - I executive summary
   - II marketing plan
   - III financial plan

   a I and II only
   b I and III only
   c II and III only
   d I, II and III

PAPER 2

Case study 1: Payroll

Glenmore owns a retail store. He has two employees whose monthly income is as follows:

Selena	Manager	$7 200
Linford	Sales assistant	$3 800

These employees are subject to the following tax rates:

Taxable income between $1 and $3 000	0%
Taxable income between $3 001 and $6 000	15%
Taxable income $6 001 and above	25%

a. Calculate the monthly income after tax for:
   - Selena
   - Linford

   Show detailed workings.

Additional information:

The employees are also subject to two other compulsory deductions:

National insurance	6% of gross pay
Pension contributions	2% of income after tax

b. Calculate the monthly net pay for:
- Selena
- Linford

Show detailed workings.

c. Identify **two** voluntary deductions which could affect these employees' net pay.

Glenmore would like to use payroll software.

d. Describe **two** benefits that could arise from the use of payroll software.

e. State **two** reasons why it may not be possible for Glenmore to use payroll software.

Case Study 2: Forward planning

Owen Williams is planning to open in business in March 2019. The business will be called "Montego Entrerprises". He plans to sell a product which will have a selling price of $34 per unit.

a. List **three** main sections Owen should include in his business plan.

Owen has prepared a forecast of likely sales for the first three months of trading:

2019	units
March	240
April	310
May	360

b. Prepare a sales budget for each of the three months ending 31 May 2019.

Owen has also prepared forecasts of cash receipts and cash payments for each of the three months ending 31 May 2019. The following details are available:

All sales will be on a cash basis.

	March	April	May
	$	$	$
Cash sales	See details above		
Capital introduced	24 000		
Purchase of non-current assets	17 300		
Payments to credit suppliers	7 500	7 800	8 100
Wages	1 560	1 800	1 800
Rent	840	840	840
General expenses	350	350	350

c. Prepare a cash flow forecast for each of the three months ending 31 May 2019.

Tip

Once you have completed these questions you can check your answers online at www.oxfordsecondary.com/9780198437260

Navigating the school-based assessment

The importance of the school-based assessment (SBA)

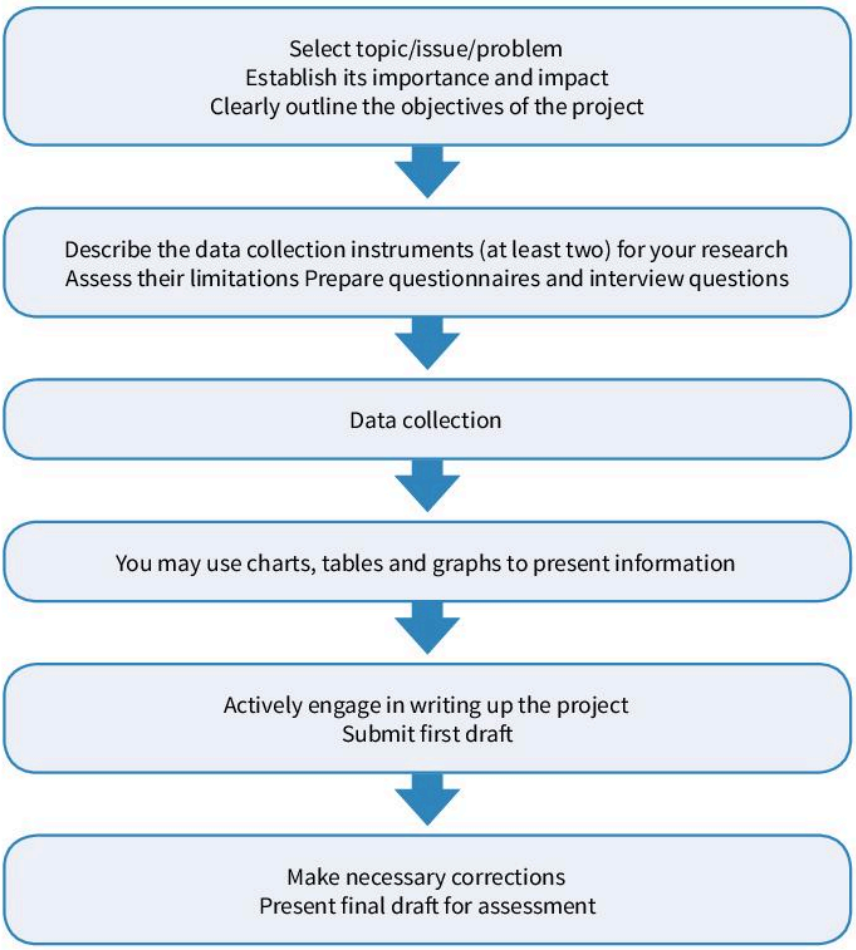
The SBA provides you with an opportunity to apply the accounting principles and techniques that you have learned during your course of study. The process of completing the SBA will help you develop your confidence in this subject area. It will give you a better understanding of the purposes and functions of accounting in real-life situations.

The SBA is a vital component of the CSEC examination and it accounts for 20% of the final mark. As well as helping to make you more self-confident and a more accomplished student in this subject, the process of completing the SBA will strengthen your critical thinking and analytical skills, which are important tools for passing your exam and for succeeding in life more generally.

How to make sure your SBA goes well

- Make an early start, so that you have enough time to revise your work and make corrections where necessary.
- Make sure you are familiar with the detailed requirements for this aspect of your course.
- Use effective time management to ensure that you have given yourself sufficient opportunities to develop your SBA on a regular basis.
- Follow instructions from your teacher and use feedback and suggestions for improvement immediately so that these do not get overlooked.
- Give a high priority to presentation by always taking a pride in your work. Take some time to check that there are no spelling or grammatical errors.
- Make sure the finished documents closely match the requirements of the syllabus.
- Ensure that correct accounting terminology is used throughout.

Completing your SBA: a guide to the key stages in the process



Naturally, circumstances vary, so the above is given as a suggestion to highlight key stages in the process.

Choosing your research project

When you choose your research project remember:

- to check on the detailed requirements set out in the syllabus
- your project must lend itself to the collection of business data
- you must demonstrate skills in the manipulation of research data (i.e. data collection, analysis and interpretation)
- you must demonstrate the application of accounting principles.

Overview of a research project

The following elements form the basis of a research project.

Topic/Issue/Problem	
Objectives	A list of what the researcher intends to achieve
Background to the topic	An overview of the business that is the subject of the project. A brief description of the proposed investigation and the research that will be conducted
Methodology and instruments	How the research will be conducted and what resources will be used
Presentation and analysis of data	Detailed results of the research
Conclusion	A full statement about what the research shows
Recommendation	A statement providing advice on changes that could be made
Bibliography	A list of resources used to support the investigation
Appendices	Copies of documents used in the research

Students taking more than one business subject

If you are taking several business subjects you must submit only one research assignment, and it should contain a research element for each of the business subjects you are studying. Your teachers will share the marking. The marks for the whole assignment will total 40.

For example:

- if you are studying Principles of Accounts and Principles of Business, you must have questions to be researched relating to principles of accounts and principles of business
- if you are studying Principles of Accounts and Economics, you must have questions to be researched relating to principles of accounts and economics
- if you are studying all three subjects you must include research questions relating to principles of accounts, principles of business and economics.

Illustration 1

Outline of an example of a research project for students who are studying Principles of Accounts only

<table>
<tr><th>Topic/Issue/ Problem</th><th>Investigating the health of XYZ Company</th></tr>
<tr><td>Objectives</td><td>• To assess the performance of XYZ Company using accounting ratios
• To provide details of the ratios used and the results of the calculations based on the company's financial statements
• To report on the performance of XYZ Company
• To make recommendations to the directors of the company based on my analysis</td></tr>
<tr><td>Background</td><td>XYZ is a limited liability company registered in (name of country). The company has over five thousand shareholders.

I investigated the company's performance by conducting a ratio analysis of the company's published financial statements for the years ended 31 December 2017 and 31 December 2018.</td></tr>
<tr><td>Methodology and instruments</td><td>The ratio analysis was based on the audited published financial statements of XYZ Company obtained from the Registrar of Companies. The ratio analysis was of the company's income statement and statement of financial position comparing results for 2018 with 2017.</td></tr>
<tr><td>Presentation and analysis of data</td><td>Example:
<table>
<tr><th>Ratio</th><th>2018</th><th>2017</th><th>Comment</th></tr>
<tr><td>Current ratio</td><td>$12.4m:$9.4m = 1.32:1</td><td>$10.6m:$5.2m = 2.03:1</td><td>There has been a decline in performance comparing 2018 with 2017. The industry average for this company is 2:1. Therefore the company's liquidity has weakened sharply.</td></tr>
</table>
(Note: the full report would contain other ratios covering the company's profitability and liquidity with a commentary on each.)</td></tr>
<tr><td>Conclusion</td><td>This would summarise the company's performance based on the ratio analysis. It would indicate areas of strength and also areas of weakness.</td></tr>
<tr><td>Recommendations</td><td>This section would advise on ways in which any weaknesses in the company's performance could be addressed, and also any steps that could be taken to maintain the areas of strength.</td></tr>
<tr><td>Bibliography</td><td>Source of the published financial statements
Textbooks used to support the project
Online resources (websites, etc.) used to support the project</td></tr>
<tr><td>Appendices</td><td>Copy of the financial statements used</td></tr>
</table>

Notes:

- The project should not exceed one thousand words (excluding appendices); a mark penalty is applied where this maximum is exceeded.
- If you are taking more than one business subject, the illustration would need to be adapted to include relevant research questions relating to Principles of Business and/or Economics. For example:
  - students studying Principles of Accounts and Principles of Business could investigate aspects of organizational principles that are likely to impact the health of the company, aspects of promotion and logistics, or aspects of finance, government and technology.
  - students studying Principles of Accounts and Economics could investigate issues relating to the macro environment (such as production, economic resources and resource allocation; demand and supply; or market structure and market failure) or to the macro environment (such as the financial sector; the policies and goals of economic management; international trade; or Caribbean economics in a global environment).

Some advice on graphs

- Remember that a graph conveys a story, so use it to highlight a vital message that is of essential importance to the project. Choose something that has real impact.
- Graphs can be produced electronically or manually.
- Choose the type of graph best suited to conveying your message, such as a column or bar chart for comparison or differentiation, or a pie chart to convey contribution or shares of a whole.
- Check that the graph is correctly and fully labelled.
- Complete your graph with some discussion or explanation of what is depicted.

Format of the examinations

The examination for General Proficiency certification will be set on the entire syllabus and will consist of two papers in the final examination and a School-Based Assessment component.

Paper 1 (1 hour 30 minutes)	A multiple-choice test of 60 items testing the profile dimensions Knowledge, Application and Interpretation in the ratio 1:2:1.
Paper 2 (3 hours)	A problem-solving paper divided into two sections. Each section will test the profile dimensions, Knowledge, Application (of accounting principles) and Interpretation (of accounts) in the ratio 1:2:1. **Section 1** – Three compulsory questions drawn from Sections 2 to 9. **Section 2** – Four questions of which the candidate must attempt two. The questions may test any of the objectives in the syllabus. Each question will be worth 20 marks; the total for five questions is 100 marks.

School-Based Assessment (SBA)	
Paper 3/1	A School-Based Assessment component (SBA) comprising an individual report on a group or (SBA) individual project.
Paper 3/2	An alternative to the School-Based Assessment component for private candidates consisting of 20 compulsory short answer questions based on case studies.

Distribution of items for Paper 1 (multiple choice test)		
Section	Title	No. of items
1	Introduction to principles of accounts	4
2	The classified balance sheet	4
3	Books of original entry	6
4	Ledgers and the trial balance	7
5	The preparation and analysis of financial statements of the sole-trader	6
6	End of period adjustments	4
7	Control systems	4
8	Incomplete records	4
9	Accounting for partnerships	5
10	Accounting for corporations (limited liability companies)	4
11	Accounting for co-operative societies	2
12	Accounting for non-trading (non-profit) organizations	4
13	Manufacturing accounts	4
14	Payroll accounting	2
	TOTAL	60

The profile dimensions and examination papers will be weighted as set out below.

Profiles	Paper 1	Paper 2	Paper 3/1 (SBA)	Total	(%)
Knowledge	15	25	10	50	(25)
Application	30	50	20	100	(50)
Interpretation	15	25	10	50	(25)
Total	**60**	**100**	**40**	**200**	**(100)**

Glossary

Accounting: the selecting, classifying and summarizing of financial data in ways that provide the owners of businesses (and others) with useful information to help them assess performance and plan future activities.

Accounting concepts and conventions (sometimes accounting principles): the set of accounting rules which ensure that users can have confidence in the information with which they are provided.

Accounting cycle: sequence of events and processes used to create the financial records of a business.

Accounting equation: links the three elements that are a feature of all businesses, i.e. assets, liabilities and capital. The equation is: Assets = Capital + Liabilities.

Accounts payable: amounts due to suppliers of goods or services on credit (at one time referred to as trade creditors).

Accounts payable control account: a process for checking entries in the purchases ledger.

Accounts receivable: amounts owed by customers for goods and services supplied on credit (at one time referred to as trade debtors).

Accounts receivable control account: a process for checking entries in the sales ledger.

Accrual: an amount owed by a business for an expense.

Accruals concept: in order to calculate profit, income for a financial period is matched exactly with expenses that relate to that accounting period, whether paid or not. (This concept is sometimes called the "matching concept".)

Acid test ratio: liquid assets in relation to current liabilities. Liquid assets are all of a business's current assets excluding inventories. This ratio is sometimes referred to as the "liquid capital ratio" and is expressed in the form xx : 1.

Allocate: where an entire direct cost can be charged to a cost centre.

Analysis columns: (in a petty cash book) a means of classifying each payment to provide totals to be posted to general ledger accounts.

Apportion: where indirect costs are divided between cost centres in a rational manner.

Appropriation account: a part of the end-of-year financial statements of a partnership recording how the profit or loss for the year is shared between the partners.

Asset: a resource with a monetary value that is owned by a business.

Auditors: external independent checkers of the accounting information used to prepare the financial statements.

Authorised share capital: the maximum amount of share capital that a limited company is allowed to issue under its constitution.

AVCO: a method of inventory valuation where the cost of unsold goods is established by calculating a weighted average of the cost of unsold items each time new items are received.

Bad debt: an amount owed by a trade receivable that will not be paid.

Balancing accounts: the process of working out the net amount left in an account and clearly stating this as a debit or credit balance at the beginning of the next accounting period.

Bank charges: payments deducted automatically from a current account at regular intervals as a payment to the bank for operating the account.

Bank reconciliation statement: a document prepared by businesses at regular intervals (say monthly) to check that their bank records agree with those provided by the bank.

Bank statement: a copy of a customer's bank account, sent to the customer at regular intervals.

Bookkeeping: the recording of financial information, particularly transactions, in a systematic way.

Books of original entry: books of first entry where transactions are listed prior to being posted to the double-entry records. These are sometimes called books of prime (first) entry.

Business plan: a document that sets out a business's objectives and strategies for achieving them for the benefit of interested parties.

Capital: the investment made by the owner(s) of a business. It equates to the net value of the business.

Capital expenditure: expenditure on non-current assets, which is recorded in the balance sheet.

Capital reserves: profits that arise from non-trading activities; they may not be used to finance the payment of dividends to shareholders.

Carriage inwards: the cost of transporting goods paid by a business on its own purchases. This expense is added to purchases in the trading account section of the income statement.

Carriage outwards: the cost of transporting goods paid by a business on its sales to customers. This expense is recorded in the profit and loss section of the income statement.

Cash book: a book of original entry in which all cash and bank transactions are recorded.

Cash discount: a reduction in the amount paid by credit customers, or to credit suppliers, when accounts are settled within an agreed time limit.

Cash flow projection: a forecast showing how cash will be generated and disposed of by an organization.

Cash flows: total money transferred into and out of a business.

Cash transaction: a financial activity involving the use of money.

Clock card: a document that gives details of the number of hours an employee has worked, which is obtained from the use of a special item of equipment: a clock card machine or time recorder.

Closing accounts: the process of completing an account that does not have a balance.

Closing inventory: goods unsold at the end of a trading period.

Columnar format: a form of presentation which has the benefit of using multiple columns.

Commission: pay that is dependent on a business's performance (often sales) and is expressed as a percentage of the performance indicator.

Compensating error: where two or more errors cancel each other out.

Confidentiality: avoiding disclosure of information to others without permission; not using a client's information for personal advantage. (The only exceptions being where there are legal or ethical reasons to provide the information.)

Consistency concept: the rule that accounting policies should be carried out in the same way year on year.

Contra entry (cash book): describes the transfer of cash to the bank, or the withdrawal of cash from the bank for office use. These transactions result in both the debit entry and credit entry for the transaction being recorded in the cash book columns.

Contra entry (control accounts): when a business deals with another business or organization as both a customer and supplier, the balance of the two accounts are set off against one another to find the net amount due. (Contra entries are sometimes referred to as "set offs".)

Co-operative society: a non-profit organization that is owned and controlled by its members, who are also its main customers.

Cost-plus pricing: where the selling price of a product is based on adding a pre-determined mark-up to the unit cost of a product. (This process is also referred to as mark-up pricing.)

Cost centre: parts of a business to which costs can be allocated and apportioned.

Cost of production: the total of all the costs of manufacturing products. It is also known as production cost of manufactured goods or production cost of completed goods.

Cost of sales: the value at cost price of goods sold during a trading period. It is found by: opening inventory + purchases – closing inventory. It is sometimes called the cost of goods sold.

Credit: the right-hand side of an account.

Credit note: the source document that records the amount to be deducted from (or allowed against) a previous invoice to avoid a business being overcharged – usually the business has returned goods to the supplier.

Credit transaction: a financial activity where the payment or receipt of money is delayed.

Credit transfer: the automatic transfer of funds into a business's bank account by one of the business's customers.

Current account: a record of a partner's drawings and shares of profits or loss.

Current assets: assets which are quickly turned into cash and of benefit to the business for a short time (less than one year).

Current liabilities: liabilities which will be settled in the near future (in less than one year).

Current ratio: current assets in relation to current liabilities. The ratio is always expressed in the form xx : 1, for example 1.8 : 1. This ratio is sometimes referred to as the "working capital ratio".

Debenture: a form of loan to a company with a fixed rate of interest over a period of time. The interest is paid before any dividends are paid out to shareholders.

Debit: the left-hand side of an account.

Debit note: a source document that is sometimes used when a business sends goods back to a supplier, and is then used as evidence for entries for returns outwards.

Deed of partnership: the formal agreement between partners that states how profit and losses will be shared and the rules under which the partners will work together.

Depreciation: the loss in value of a non-current asset over its useful life.

Direct costs: costs that are attributable to a particular product, for example direct materials and direct labour.

Direct debit: where authority is given to a bank by one of its customers to make payments on its behalf to another organization. The amount paid is that requested by that organization up to a specified limit.

Directors: officials appointed by the shareholders to manage the company for them. A director can be, but does not have to be, a shareholder.

Dishonoured cheque: a cheque that a bank will not accept for payment, because the payee (person writing the cheque) does not have enough money in their account to cover the amount being paid. It is also sometimes called a "returned" cheque.

Dividend: the amount given to shareholders as their share of the profits of the company.

Drawings: the removal of resources (usually money) from the business for the private use of the owner.

Efficiency: a measure of performance highlighting a business's use of its resources.

Error of commission: where a debit or credit entry is made in the wrong account but within the correct group of accounts.

Error of complete reversal: where the account that should have been debited is credited in error and the account that should have been credited is debited.

Error of omission: where a transaction is overlooked and no entries are made in the books of account.

Error of original entry: when a mistake is made transferring an amount from a source document to a subsidiary book.

Error of principle: where a debit or credit entry is made in the wrong type of account.

Ethical principles of accounting: the moral principles and standards that govern the conduct of those working in the profession.

Expenses: payments made to purchase goods or services to run the business that are of short-term benefit to the business.

Expense as a percentage of revenue: any expense in relation to revenue (measured as a percentage).

Factory overheads: the indirect costs incurred in the production of the products, for example depreciation of machinery, factory insurance and factory rent.

FIFO: a method of inventory valuation where the cost of unsold goods is established by assuming that the first items received were the first items to be issued, that is, first in first out.

Finished goods: fully completed goods.

Fixed capital: an arrangement whereby each partner's capital contribution remains unchanged unless all partners agree to an alteration.

Fixed rate: pay that is an agreed amount for a period of time, for example an annual salary.

Fluctuating capital accounts: where partners have just one account to record their capital contributions, drawings and shares of profits and losses.

Folio references: a system of numbering pages and/or individual accounts that enables quick reference to be made to the source of an entry in the double-entry system.

General journal: a book of original entry used to make the first record of transactions that it would not be appropriate to record in the other books of original entry (cash books and purchases, sales and returns books).

General ledger: a part of the double-entry system that is used to keep all the accounts other than those for accounts payable (kept in the purchases ledger) and accounts receivable (kept in the sales ledger).

Gross pay: pay before any deductions.

Gross profit: the difference between the income from sales and the expenditure on goods sold.

Gross profit percentage: gross profit in relation to revenue (measured as a percentage). Sometimes this ratio is expressed as gross profit in relation to turnover. Turnover means revenue – or, to be precise, net revenue (revenue less returns inwards).

Honorarium: a voluntary payment to the members of the management committee as a token of appreciation for services performed.

Imprest: a system for maintaining a petty cash book that gives the petty cashier responsibility for a petty cash float.

Income statement: an end of period financial statement that includes the trading and profit and loss accounts.

Indirect costs: costs that cannot be attributed to a particular product, for example indirect labour such as the wages of supervisory staff.

Integrity: being straightforward and honest in all professional and business relationships.

Interest on a partner's loan: where there is no agreement in place, a partner who has made a loan to a partnership over and above the capital contribution is entitled to interest at 5% per annum. The interest must be charged to the income statement (profit and loss section) as an expense.

Interest on capital: a reward for each partner in the form of a share of profits that is related to the amount of capital contributed by the partner.

Interest on drawings: a penalty whereby a partner is charged interest on drawings. The interest takes account of the amount of the drawings and the timing.

Issued share capital: the amount of share capital that the company has actually issued, which cannot exceed the authorised amount.

Late lodgment: amount paid into a business's bank but which has not yet been recorded on the bank statement (as a credit entry).

Ledger: a book in which accounts are kept.

Liability: an amount owed by a business to other businesses, organizations or individuals.

LIFO: a method of inventory valuation where the cost of unsold goods is established by assuming that the last items received were the first items to be issued, that is, last in first out.

Limited liability: the liability of any shareholder to the debts of the company is limited to the amount of their fully paid-up shares.

Limited liability company: an organization owned by its shareholders, whose liability is limited to their share capital.

Limited partnership: where one or more of the partners has limited liability for the debts of the business.

Liquid capital ratio: liquid assets in relation to current liabilities. Liquid assets are all of a business's current assets excluding inventories. This ratio is often referred to as the "acid test ratio" and is expressed in the form xx : 1.

Liquidity: a measure of performance highlighting a business's ability to pay its day-to-day commitments.

Manufacturing account: an account prepared at the end of a financial period in order to calculate the production cost of manufactured goods.

Mark-up: gross profit in relation to cost of sales (measured as a percentage).

Miscast: incorrectly totalled. Undercast would mean that a total is too small; overcast would mean that a total is too large.

Mutual agency: a legal relationship between partners in a partnership where each partner has authorization powers and the ability to enter the partnership into business contracts.

Net book value (NBV): the value of a non-current asset that takes account of its cost less the total depreciation to date.

Net current assets: a term often used instead of working capital and calculated in the same way: current assets less current liabilities. When the figure is negative the term used is net current liabilities.

Net profit: the difference between a business's income (sales) and expenditure (purchases and expenses).

Net profit percentage: profit in relation to revenue (measured as a percentage).

Nominal accounts: accounts recording expenses and incomes.

Nominal value: the price description of an issued share under the company's constitution.

Non-current assets: assets which should be of benefit to the business for a long time (more than one year).

Non-current liabilities: liabilities which will be settled in the longer term (longer than one year). Sometimes referred to as a long-term liability.

Non-profit organization: an organization whose main objective is not to make a profit but to provide a service for members.

Objectivity: means avoiding bias, conflicts of interest or the undue influence of others when making professional judgments.

Opening inventory: goods unsold at the beginning of a trading period. In amount, this will be the same as the closing inventory from the previous period.

Order of liquidity: the sequence used to list items on a statement of financial position (balance sheet) where items likely to last for the shortest time appear first and those which are likely to last for the longest time appear last.

Order of permanence: the sequence used to list items on a statement of financial position (balance sheet) which begins with items which are likely to be longest lasting and ending with items which are likely to be shortest lasting.

Ordinary shares: shares entitled to dividends after the preference shareholders have been paid their dividends. Ordinary shares receive a variable rate of dividend dependent on the level of profit. Ordinary shares normally carry voting rights.

Partnership: a form of business ownership when two or more individuals work together with the intention of making a profit.

Partnership salary: a reward in the form of a share of profits for any partner who has particular responsibilities in the business.

Payables payment period: accounts payable in relation to credit purchases, usually expressed in days.

Payroll: the document that summarises details of each employee's pay on a week-by-week or month-by-month basis.

Pencil footings: handwritten totals of the debit side and credit side of an account, written neatly in pencil, legible but very small in size. The totals are used to help in the preparation of a trial balance. The pencil footings are erased at a later stage when the trial balance has been prepared.

Personal accounts: accounts of individual credit customers and credit suppliers.

Petty cash: small cash payments.

Petty cash book: a book of original entry used for recording small cash payments with information taken from petty cash vouchers. The petty cashier often has a float (called an imprest) to use for these payments.

Petty cash voucher: the source document for each petty cash payment.

Piece rate: pay that is based on the work done in terms of products made, processes completed, etc.

Piecework ticket: a document that records the number of items that quality has passed for payment using piece rates.

Posting: transferring data from the books of original entry.

Preference shares: shares entitled to a fixed rate of dividend that is appropriated ahead of any ordinary share dividend. Normally, preference shares are seen as low risk and do not carry voting rights.

Prime cost: the total of all direct costs incurred when producing the products.

Production budget: a forecast of the units of products that must be manufactured based on information from the sales budget and taking account of movements in inventory of finished goods.

Production or worker co-operative: its members are employed by, as well as trade with, the co-operative.

Professional behaviour: taking personal responsibility for adopting the highest standards of the profession by complying with legal requirements, regulations and avoiding any action that would discredit the profession.

Professional competence and due care: keeping knowledge and skills at the appropriate level in order to deliver the services to clients diligently.

Profit: the difference between a business's income (sales) and expenditure (purchases and expenses). The term "profit" has replaced the expression "net profit" in financial statements.

Profit and loss account: the part of the business's income statement used to find the profit (or loss).

Profit and loss sharing ratio: the ratio that is used to share any residual profit (or loss) of a partnership.

Profitability: a measure of performance highlighting profit in relation to the resources used in a business.

Provision for doubtful debts: an amount set aside from profits to take account of the likelihood that some trade receivables will not pay the amount due.

Prudence concept: where there is doubt, asset and profit values should be under- rather than overstated.

Purchase invoice: the source document that provides information about goods (or services) purchased on credit, particularly the amount due.

Purchases book: a book of original entry used to record purchases of goods on credit. The information required to prepare this book is taken from purchases invoices.

Purchases ledger: a part of the double-entry system that is used to keep the indvidual accounts of credit suppliers (accounts payable).

Purchases returns: goods sent back by a business to the supplier. Also known as "returns outwards".

Purchases returns book: a book of original entry used to record in date order goods returned to credit suppliers with information taken from credit notes received.

Rate of inventory turnover: cost of sales divided by average inventory (often expressed as "so many times" in a particular financial period).

Real accounts: accounts recording assets.

Receipts and payments account: an account used by non-profit organizations to record a summary of cash receipts and payments.

Receivables collection period: accounts receivable in relation to credit sales, usually expressed in days.

Reducing-balance method: where the annual depreciation charge is based on the value of the non-current asset at the beginning of the year under review. This method is sometimes called the "diminishing-balance method".

Reserves: profit not distributed to shareholders, but set aside for future use.

Residual profit or loss: the profit (or loss) of the partnership after all agreed rewards have been allocated to partners.

Return on capital investment: the profit made by the business in relation to the funds invested by the owner. The ratio is expressed as a percentage.

Revenue expenditure: expenditure on everyday running costs, which is recorded in the income statement.

Revenue reserves: profits that arise from trading activities; directors may use these reserves to finance the payment of dividends to shareholders.

Sales book: the book of original entry used to record the sale of goods on credit. The information required to prepare this book is taken from the sales invoices. This book of original entry is sometimes called the sales journal.

Sales budget: an itemization of a business's sales expectations for a future period, in both units and dollars.

Sales invoice: the source document that provides information about goods (or services) sold on credit.

Sales ledger: a part of the double-entry system that is used to keep the accounts of individual receivable accounts.

Sales returns: goods that a business receives back from credit customers. Also known as "returns inwards".

Service co-operative: its members trade with the co-operative.

Share premium: the difference between the nominal value of shares and the price at which they are issued.

Shareholders: the owners of the share capital of a limited company.

Shares: the capital of a limited company is split into parts called shares.

Solvency: a measure of the extent to which a business is able to meet its obligations. (An insolvent business is one that does not have the resources to meet its obligations.)

Stakeholders: individuals and organizations that have an interest in how a business performs.

Standing order: where a bank's customer gives instructions for the automatic payment to another organization of a fixed amount at regular intervals.

Statement of financial position (balance sheet): a statement which shows an organization's assets, liabilities and capital at a particular date which is usually prepared at the end of a financial period.

Statutory deduction: an amount that an employer is legally required to take from an employee's gross pay.

Statutory reserve: to meet a legal requirement, a fixed percentage of any net surplus of income over expenditure is transferred to this reserve.

Stewardship: the idea that managers, directors, etc., are responsible to the owners of a business for the efficient use of a business's resources.

Straight-line method: where the annual depreciation charge is based on the cost of the non-current asset and is the same amount each year. This method is sometimes called the "fixed instalment method".

Source document: a written document that provides information from which accounting records can be prepared. It provides evidence that a particular transaction took place.

Suspense account: a temporary account used to make the totals of a trial balance agree.

"T" account: a two-sided form used to record, in a simple way, transactions affecting a particular aspect of a business's financial activities.

Time rate: pay that is based on the numbers of hours worked.

Time sheet: a document that records the hours worked by an employee who works off site.

Trade discount: a reduction in price given as a reward for buying in large quantities.

Trading account: the part of a business's income statement used to find the gross profit (or gross loss).

Transaction: a financial activity or financial event.

Treasurer: a person appointed to look after the financial records of a non-profit organization.

Trial balance: a summary of all the balances on all the accounts in a business's books of account that provides a check on the accuracy of the double-entry records.

True and fair: the principle that accounting records should be factually accurate wherever possible, or otherwise present a reasonable estimate of, or judgment about, the financial position.

Unpresented cheque: a cheque that has not been cleared by the bank and not yet recorded on a business's bank statement (as a debit entry).

Voluntary deduction: an amount that an employee requests the employer to take from his or her pay.

Work in progress: partly finished goods.

Working capital: the difference between total current assets and total current liabilities. The figure (which can be positive or negative) gives some idea of funds available to run the business on a day-to-day basis.

Working capital ratio: current assets in relation to current liabilities; the ratio is sometimes called the "current ratio". The ratio is always expressed in the form xx : 1, for example 1.8 : 1.

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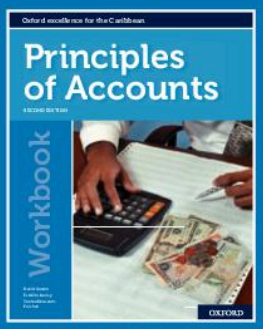

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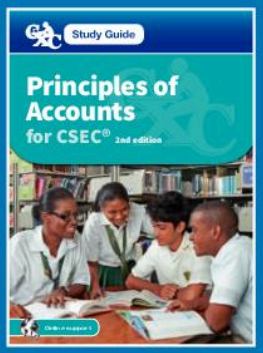

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