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JACARANDA

HUMANITIES AND SOCIAL SCIENCES

FOR WESTERN AUSTRALIA

THIRD EDITION

8



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JACARANDA 
HUMANITIES AND
SOCIAL SCIENCES
FOR WESTERN AUSTRALIA | THIRD EDITION

ROBERT DARLINGTON

JUDY MRAZ

MATTHEW RICHARDSON

MEREDITH BEATON

CATHY BEDSON

YASMINE MACAFFERTY

DENISE MILES

SIMON PHELAN

ALEX SCOTT

GRAEME SMITHIES

ASHLEY WOOD

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This suite of resources may include references to (including names, images, footage or voices of) people of Aboriginal and/or Torres Strait Islander heritage who are deceased. These images and references have been included to help Australian students from all cultural backgrounds develop a better understanding of Aboriginal and Torres Strait Islander Peoples' history, culture and lived experience.

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The publisher acknowledges ongoing discussions related to gender-based population data. At the time of publishing, there was insufficient data available to allow for the meaningful analysis of trends and patterns to broaden our discussion of demographics beyond male and female gender identification.

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Meet our author team

Robert Darlington

Robert specialises in History and Economic History, serving at several schools as a teacher and Head Teacher of History. Robert is now a highly respected and full-time author and has written History resources for publishers including Kangaroo Press, Heinemann Education, Routledge, Raintree Steck-Vaughn, Harcourt Education, the ABC education website, and Jacaranda.

Judy Mraz

Judy is a respected Australian Geography educator and author, known for her significant contributions to advancing Geography education. Her work, including authoring for the Jacaranda Humanities Alive series, has had a lasting impact on Geography teaching across Australia.

Matthew Richardson

Matt is a Humanities and Commerce teacher with over 25 years' experience. Matt is the co-author of several Jacaranda textbooks in the areas of Business Management, Legal Studies, Economics and Business, and Civics and Citizenship.

Meredith Beaton

Meredith is an experienced Western Australian HASS teacher who has worked in many different educational contexts in her 21 years of teaching. She has a particular interest in helping students build their HASS skills through inquiry-based learning.

Cathy Bedson

With over 35 years of teaching experience in Humanities and Civics curriculum development, Cathy has also tutored, mentored, assessed, prepared exams, and delivered professional learning for teachers. Cathy has worked with Jacaranda for over 20 years, authoring and contributing to resources in Civics, Geography, and Legal Studies.

Yasmine McCafferty

Yasmine McCafferty is a History and English teacher and has been in educational leadership for many years. She is a passionate advocate for igniting student curiosity.

Simon Phelan

Simon has taught at government and independent schools over the past 39 years. He is currently a Senior Commerce teacher and Accounting Coordinator in the Faculty of Education Master of Teaching program at Melbourne University.

Alex Scott

Head of Politics at Penleigh and Essendon Grammar School, Alex has taught Geography and Politics for over 25 years. He has also appeared on 'Gardening Australia' to discuss rare plant conservation.

Ashley Wood

Ashley is a History teacher with over twenty years of experience in secondary education. He has served as Head of Humanities for ten years. Ash has contributed to numerous History texts for Jacaranda Wiley.

About this resource



NEW FOR

REVISED WESTERN AUSTRALIA CURRICULUM



JACARANDA

HUMANITIES AND SOCIAL SCIENCES **8** FOR WESTERN AUSTRALIA THIRD EDITION

Developed by teachers for students

Every lesson in the new *Jacaranda Humanities and Social Sciences* series has been carefully designed to support teachers and to help students by sparking curiosity and engagement through discussion and HASS skills activities

Because both *what* and *how* students learn matter



Learning is personal

Students: Access lessons tailored to your needs, with interactive content and support to help you progress confidently.

Teachers: Deliver engaging, differentiated lessons with built-in scaffolding and tools to support every learner.



Learning is effortful

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Learn online with Australia's most

Everything you need
for each of your lessons
in one simple view

- New: AI-powered personal tutor, jacTUTOR
- Trusted, curriculum-aligned content
- Engaging, rich multimedia
- Deep insights into progress
- Immediate feedback for students
- A full suite of lesson resources for teachers

Practical teaching advice and ideas for
each lesson provided in teachON

The screenshot displays the teachON interface for a lesson titled "9.6 Does everyone have enough water?". The page includes a navigation bar with the "learn on" logo and "Humanities and Social Sciences 7 WA 3e". The main content area features the lesson title, a "LEARNING INTENTION" section with a bulleted list of objectives, a "Tune in" section with a text block and a figure caption, and a question prompt. The right sidebar shows a "9.6 Exercises" section with a "SELECT YOUR" dropdown menu and a "SUBMIT ANSWER" button. The bottom of the page shows a breadcrumb trail: "9.5 INVESTIGATING TOPOGRAPHIC MAPS - THE VALUE OF WATER IN NOOSA".

learn on Humanities and Social Sciences 7 WA 3e

9.6 Does everyone have enough water? 9.6 teachON

LESSON 9.6

Does everyone have enough water?

LEARNING INTENTION

By the end of this lesson, you should be able to:

- identify and explain the three main ways people use water
- describe virtual water and its impact on water consumption
- compare the differences and impact of water variability, availability and accessibility between countries.

Tune in

FIGURE 1 In some countries women and girls can spend up to six hours each day collecting water. The average distance they walk is 6 km. The average weight they carry on their heads or backs is about 20 kg.

FIGURE 1 In some countries, women and girls can spend up to six hours each day collecting water.

1. If women and children are spending this much time collecting water, what other opportunities are they missing?

9.6 Exercises

SELECT YOUR

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D Munic

SUBMIT ANSWER

b. Which regions o
all that apply.

SAVE

9.5 INVESTIGATING TOPOGRAPHIC MAPS - THE VALUE OF WATER IN NOOSA

powerful learning tool, learnON

The image shows a screenshot of the learnON software interface. The interface is divided into several sections: a top navigation bar with 'SHARE', 'Teacher', 'Student', 'No Class', 'Help', and a user profile 'Sabiha Mcfarland'; a main content area with a '9.6 Ex 1' header and a '9.6 TBQ' tab; a 'Resources' sidebar on the right; and a main question area at the bottom. A 'jacTUTOR AI Beta enabled' banner is visible at the top left. The 'Resources' sidebar lists various resource types with counts: eWorkbook (7), Digital documents (3), Teacher-led videos (7), Video eLessons (1), Audio (5), Interactivities (3), TEACHER Topic PDF (1), TEACHER eWorkbook (3), TEACHER Sample responses (1), and TEACHER Digital documents (3). The main question area shows a question about water scarcity with a '1 mark(s)' indicator and a 'TUTOR' icon. Callout boxes on the right point to specific features: 'Differentiated question sets' points to the '9.6 TBQ' tab; 'Teacher and student views' points to the 'Teacher' and 'Student' buttons; 'Textbook questions' points to the '9.6 Ex 1' header; 'eWorkbook' points to the 'eWorkbook' resource; 'Digital documents' points to the 'Digital documents' resource; 'Video eLessons' points to the 'Video eLessons' resource; 'Audio' points to the 'Audio' resource; 'Interactivities' points to the 'Interactivities' resource; 'Extra teaching support resources' points to the 'TEACHER' resources; 'Interactive questions with immediate feedback' points to the question area; and 'jacTUTOR' points to the 'TUTOR' icon.

Differentiated question sets

Teacher and student views

Textbook questions

eWorkbook

Digital documents

Video eLessons

Audio

Interactivities

Extra teaching support resources

Interactive questions with immediate feedback

jacTUTOR

Get the most from your online resources

Online, these new editions are the **complete package**

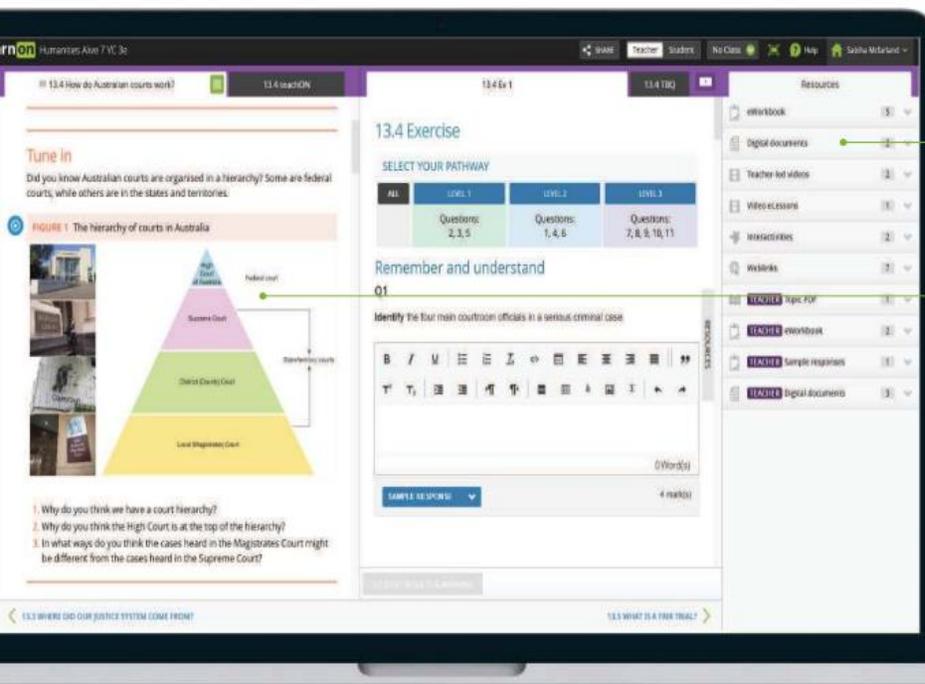
Trusted Jacaranda theory, plus tools to support teaching and make learning more engaging, personalised and visible.

Embedded interactivities and videos enable students to explore concepts and learn deeply by 'doing'.

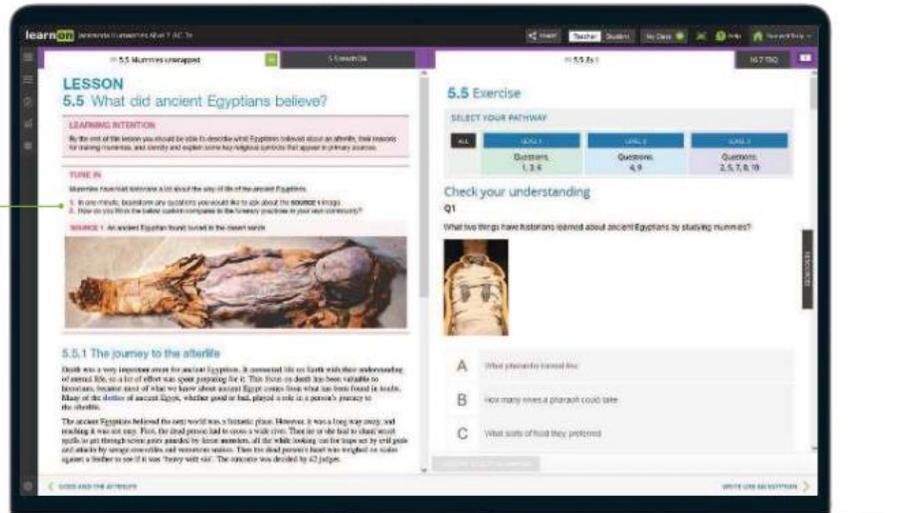


Targeted digital resources include video eLessons and weblinks.

Tables and images break down content, allowing students to understand complex concepts.

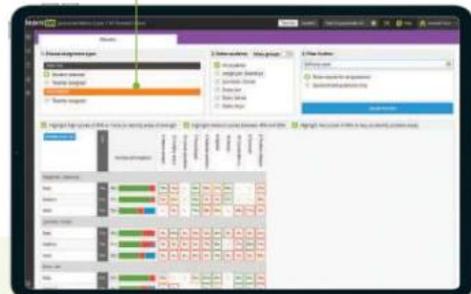


Brand new! Tune in in activities to spark interest and kick off every lesson with discussion and source analysis

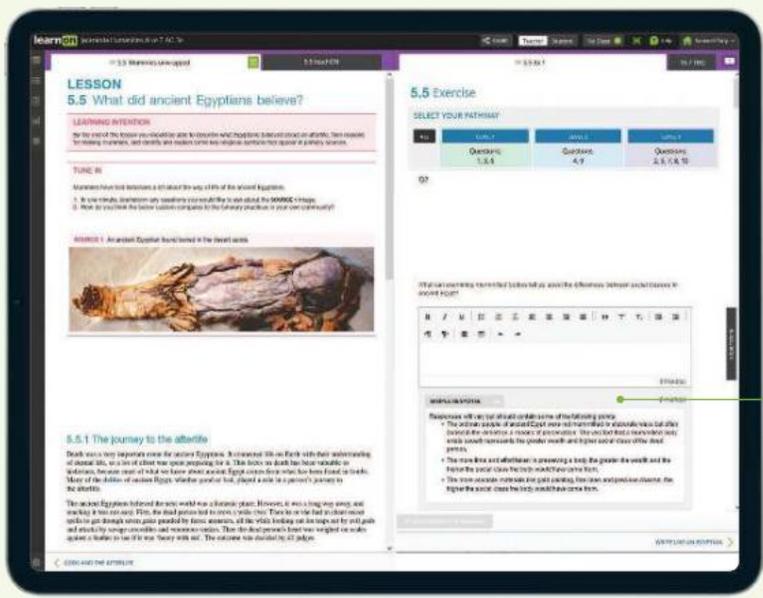


Three differentiated question sets, with immediate feedback in every lesson, enable students to challenge themselves at their own level.

Instant reports give students visibility into progress and performance.



Every question has immediate, corrective feedback to help students overcome misconceptions as they occur and get unstuck as they study independently — in class and at home.



The new jacTUTOR

An AI tutor to build confidence and get unstuck

With jacTUTOR, every student can have the help of a personal tutor when they get stuck, in class or at home. This purpose-built tool sits safely within your favourite Jacaranda resource, so guidance will always be specific to that lesson, question and curriculum.



A personal tutor for every student

Now every student can get the help they need, when they need it. jacTUTOR uses AI to create a fair and level playing field for all students.



Get guidance, not the answer

jacTUTOR doesn't just give the answer away. Students are given prompts to help understand what they should be asking to get to a correct answer.



Combat anxiety

Afraid to raise a hand or ask more questions? With jacTUTOR, students will find a safe space to ask questions, get clarification and try again.



A safe space

To keep students safe, any concerning or inappropriate comments are automatically flagged and sent to their teacher.

The screenshot shows the jacTUTOR interface overlaid on a laptop screen displaying a math lesson. The lesson is titled "LESSON 5.4 The unitary method and best buys" and includes a "5.4 Exercise" section. The exercise asks "Which of the following is the best buy?" and provides a table of chocolate weights and costs:

Chocolate weight	Cost
150 g	\$3.25
250 g	\$4.75
325 g	\$5.50

The jacTUTOR interface shows a chat window with the following text:

RESOURCES | jacTUTOR

Can you help with subtopic 5.4 Exercise 2 Q1

Sure, please select a help option below.

Assistant is in beta

WHAT IS THE QUESTION ASKING?

CAN YOU SHOW ME HOW TO START?

HOW CAN I CHECK MY ANSWER?

Ask JacTutor ... to come



A wealth of teacher resources

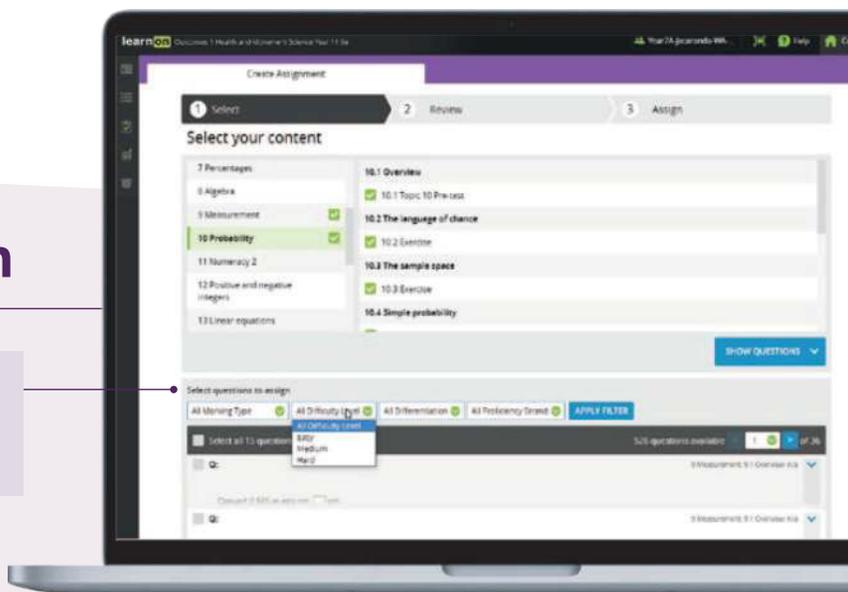


A wealth of enhanced teaching-support resources for every lesson, including:

- work programs and curriculum grids
- practical teaching advice
- quarantined topic tests (with solutions)

Customise and assign

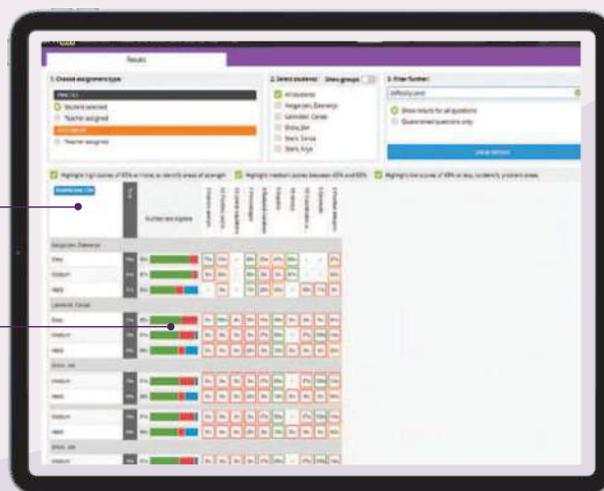
An inbuilt testmaker enables you to create custom assignments and tests from the complete bank of thousands of questions for immediate, spaced and mixed practice.



Reports and results

Data analytics and instant reports provide data-driven insights into progress and performance within each lesson and across the entire course.

Show students (and their parents or carers) their own assessment data in fine detail. You can filter their results to identify areas of strength and weakness.



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LESSON 1.1 Overview

INQUIRY QUESTION

Why is it important to study HASS, and what skills can I build?

Welcome to Year 8 HASS. Think back to Year 7 HASS and what you learnt. This subject is all about us: humans. It's about where and how we live. It's also about how and where people lived in the past, how people different from you are living now and what life might be like for people in the future.

As you know, HASS stands for **H**umanities and **S**ocial **S**ciences. In HASS, there are four subjects:

- Civics and Citizenship
- Economics and Business
- Geography
- History.

Remember that HASS isn't just about each of these subjects individually; in HASS, you will also explore how each of these subjects are connected — just like the parts of our world are connected.

learn on

eWorkbook

Customisable worksheets for this topic

Digital document

Key terms glossary

This topic is supported by a range of differentiated worksheets available in your Resources panel. For each SkillBuilder, there are three levels of worksheets: Level 1, Level 2 and Level 3. Use these worksheets for a structured, step-by-step approach to mastering and applying your HASS skills effectively.



SkillBuilder

Use the SkillBuilder activities to build your HASS skills of:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

LESSON 1.2 Key concepts and skills in HASS

LEARNING INTENTION

By the end of this lesson you should be able to **identify** the key concepts and skills in Year 8 HASS.

1.2.1 Key concepts in Year 8 HASS

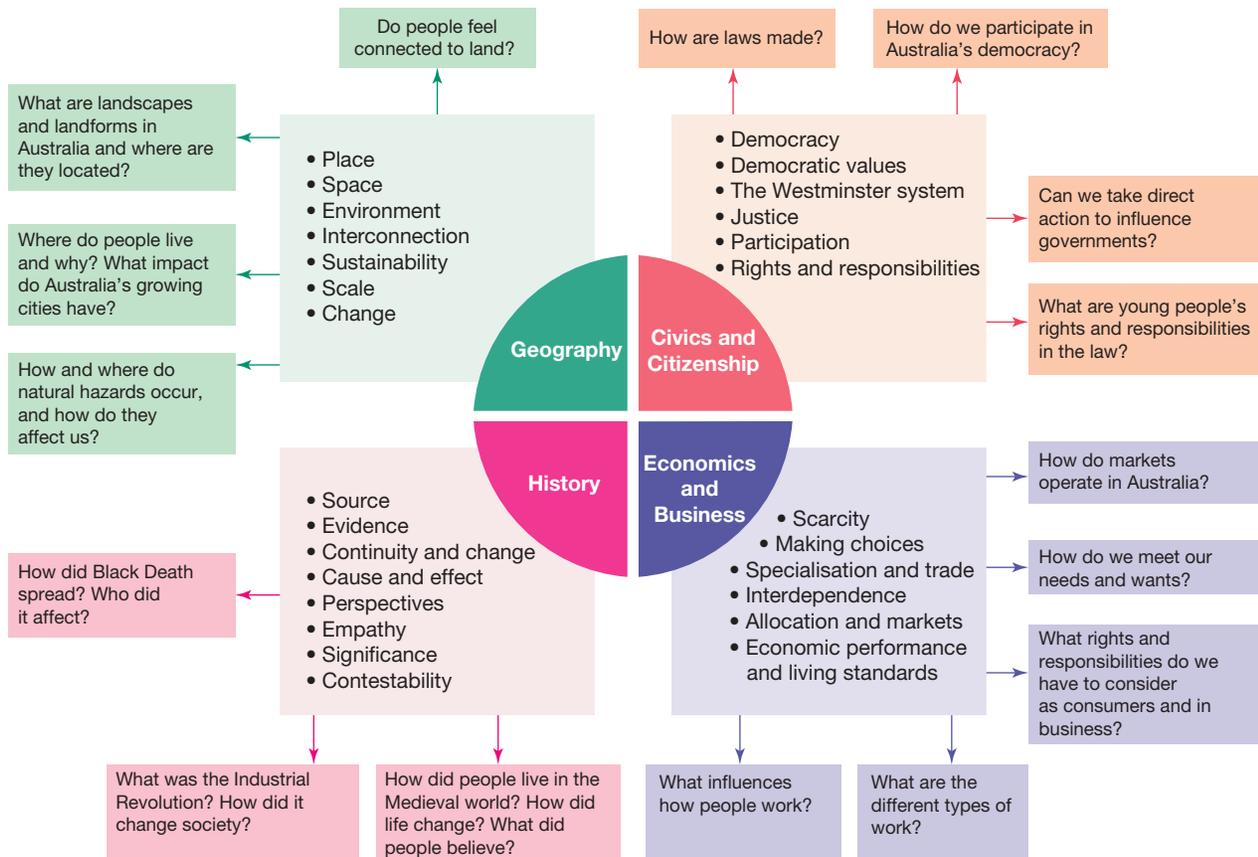
You learnt the basics of HASS concepts last year but in Year 8 you will learn about them in more detail, with new thoughts and ideas for you to process. In HASS, you will learn about new ideas and events every year, but under the umbrella of these core concepts.

The big questions you will try to answer in HASS this year relate to things that affect your everyday life, as individuals, members of teams and families, and members of local and global communities. These big questions are outlined in **FIGURE 2**. Even if it doesn't seem like these things affect you at the moment, they will in the future. You will also continue building on what you learnt in Year 7 and how these concepts apply to everyday life.

FIGURE 1 You will build your HASS proficiency this year, learning new skills and new ways to use the skills you learnt last year.



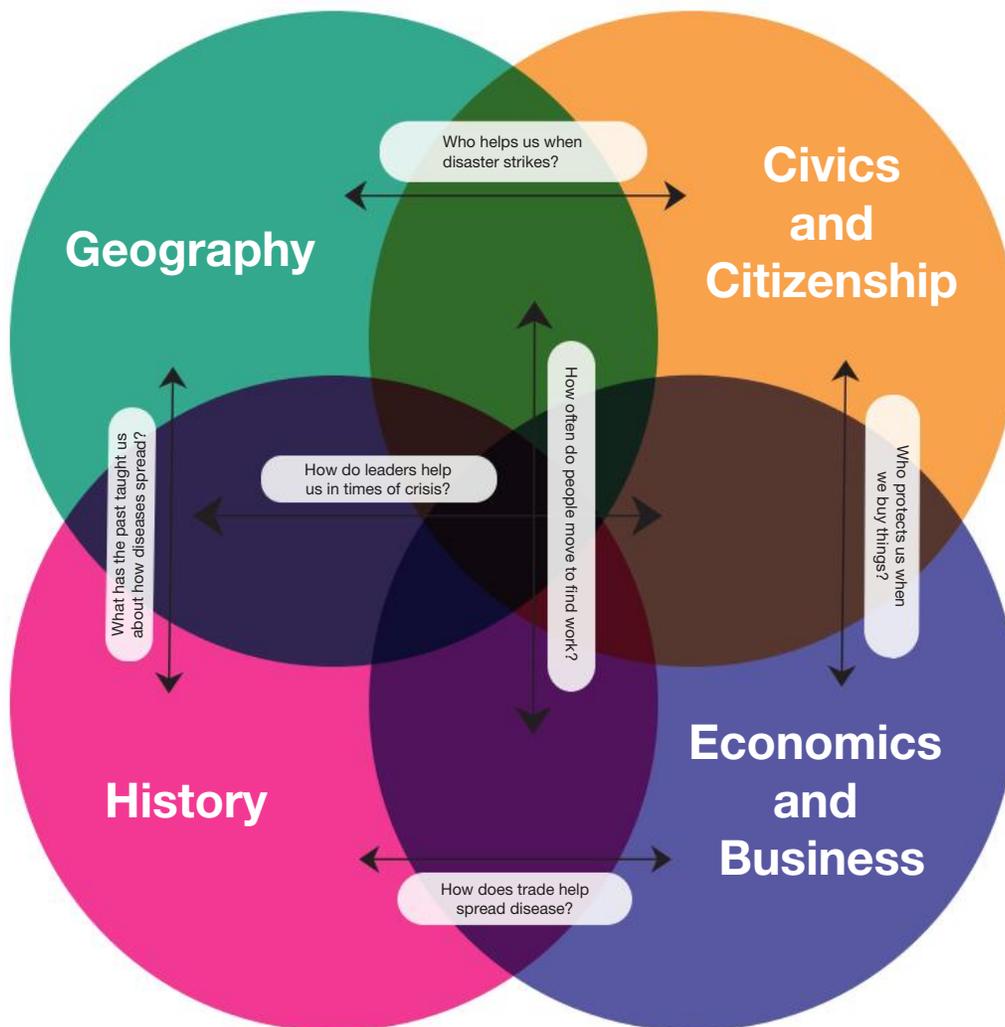
FIGURE 2 The main concepts in HASS for each subject



Just because there are four subjects within HASS, it doesn't mean they aren't connected. They all connect to each other in many ways.

For example, this year, you will explore some of the connections shown in **FIGURE 3**.

FIGURE 3 The different subject areas in HASS are all connected.



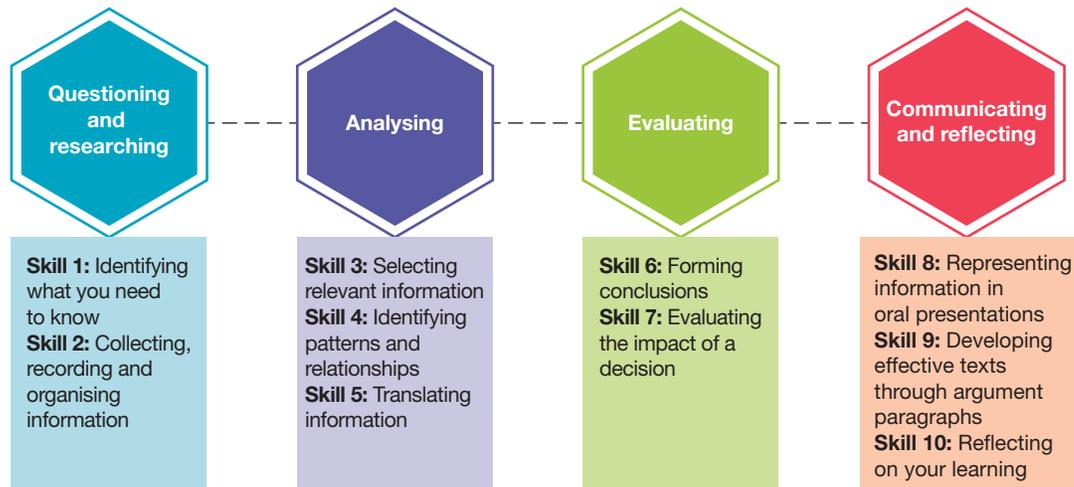
1.2.2 Key skills in HASS

HASS involves asking questions and investigating issues, so it's important to be curious about the world around you. You will need to investigate, research and analyse to learn more about humans and their society.

In Year 7, you learnt some of these skills on a basic level, but as you work through HASS you will learn to use these skills in a more sophisticated and detailed way, in the same way you are learning about the key concepts in more depth. You will find the same skills taught in years 8, 9 and 10 HASS, but as you move through your schooling, the level at which you will use these skills will become deeper and more accomplished. You will also become more confident and independent in using these skills, both at school and in the real world.

The following outline shows the four main skills you will learn to help you be more curious, each broken down into a set of smaller steps. Each of these skills will be explained in more detail in this topic.

FIGURE 4 Each HASS skill is made up of a set of smaller skills.



1.2.3 Questioning and researching



Questioning and researching are multi-step processes.

When you have been given a topic to discuss or a problem to solve you need to ask good questions about the topic to focus your research. Without that focus, you are looking for answers without any clear direction. When you have a task to complete, you don't want to leave the chances of finding the right information to luck.

This year, you will be refining and developing the two main questioning and researching skills you were introduced to across your HASS subjects in Year 7: creating well-focused inquiry questions and ensuring your information comes from a wide range of useful, accurate and reliable sources.

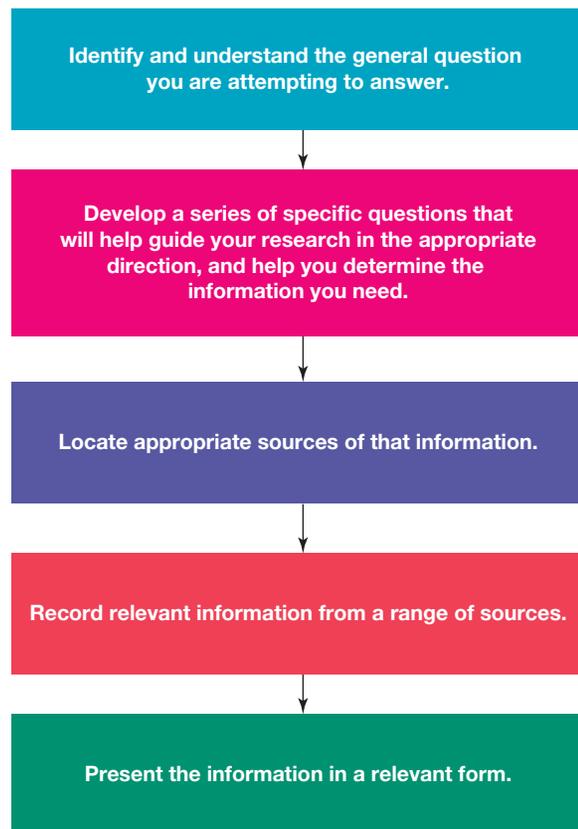
1.2.4 Analysing



Analysing is the process of carefully examining and comparing information. When we analyse data or sources, we are looking for connections between ideas and events, or how things have changed over time. When you analyse, you:

- identify the facts included in a source
- identify whether there is any relationship (e.g., a connection, such as cause and effect) between the ideas and/or facts
- suggest what relationships or connections the data shows
- suggest what trends or patterns the data shows
- suggest what different or similar views (perspectives) are shown or suggested.

FIGURE 5 The process of researching a topic



You began the process of analysing when you did your research — analysing whether sources were likely to be useful. You developed your analysis skills in Year 7, but now it is time to build on those skills by thinking about how relevant the information is on a deeper level than simply whether it answers the basics of a question.

1.2.5 Evaluating



Evaluating means looking at the information and sources you have gathered, as well as the relationships, trends and viewpoints you have discovered through your analysis, to come to conclusions about what you have learnt. It also involves weighing up the benefits or problems of possible solutions or actions.

This is the skill where you bring everything you have learnt together and make a judgement.

In HASS, you will often find that your evidence leads you to a conclusion that involves a ‘yes, but . . .’, or a ‘sometimes’ or a ‘no, but . . .’ In fact, the more skills you develop in HASS, the more likely you are to reach one of these ‘grey area’ conclusions. They generally show that you are thinking quite deeply about an issue and can see it from a range of perspectives. As you develop your ability to reason through problems faced by humanity, you become more skilled at working through those ‘grey areas’ and finding a solution that might work to lessen the harm and maximise the benefits of a change or an action.

1.2.6 Communicating and reflecting



One of the main parts of conducting research is communicating: sharing your findings with others. When you do this, you need to keep your audience in mind. For example, if you are creating an infographic for your Year 8 classmates, you need to make sure they will understand what they are reading and be interested in reading it. This means you need to adjust your language and your way of presenting information to make it appropriate to them.

It is also important to use accurate and specific terminology to express what you are saying. This demonstrates to your teacher that you have built your subject vocabulary and can use the words you have learnt precisely. Referring to your evidence and sources to prove your argument will help to clearly communicate your understanding too.

The final part of any learning process is reflecting on what you have learnt. This means looking back at what you have *done* (questioning and researching, analysing, evaluating and communicating) as well as what you have *learnt* about the topic you have been investigating.

Reflecting on what went well and what you might be able to do better helps you to learn how to improve your skills and understanding.

Ask yourself questions such as:

- What did I do well?
- What could I do better next time?
- What did I learn?
- How can I apply this information in my life?

1.2.7 HASS skills focus in Year 8

DIDN'T WE DO THIS LAST YEAR?

In Year 8, some of the skill-building work you will be asked to complete and the processes you are asked to follow will be familiar; others will involve new stages to take you deeper into a process.

The familiar stages are to consolidate your understanding — in other words, to make what you learnt last year 'stick' and to make sure you remember the key concepts and skills well. This gradual building of difficulty and depth, mixed with a little repetition, is an important part of the process of careful skill-building.



Think of building these HASS skills in the same way as you might consider your ability for making a cake. Last year, you began baking basic cakes with simple flavours. There might not have been any decorations, or they might have been a little bit messy or simple. This year, your baking skills should improve; you will learn to make more complicated cakes with different flavour combinations and layers, and the decorations will become more complicated and impressive.

This is the same as your HASS skills. You begin with the basics — for example, asking good but straightforward questions. This year, as you learn more, your 'flavours' will become deeper and more complex, and your 'decoration' neater and more precise.

FIGURE 6 Your HASS skills will build in complexity across years 7–10.



Learning pathways

■ LEVEL 1

1, 2, 3, 5

■ LEVEL 2

4, 6, 7, 9

■ LEVEL 3

8, 10

REMEMBER AND UNDERSTAND

1. True or false?
The acronym HASS means for Humanities and Student Sciences.
2. **Explain** what benefit questioning and researching skills have in HASS.
 - A. To improve communication skills
 - B. To develop curiosity about the world and focus on research
 - C. To create visually appealing posters
 - D. To analyse data from various sources
3. True or false?
Analysing is about deciding what you learn from the information.
4. **Identify** the skill that involves coming to conclusions about research and weighing up benefits or problems.
 - A. Questioning
 - B. Communicating
 - C. Evaluating
 - D. Researching
5. True or false?
Reflecting in HASS involves thinking about what went well and what could be improved.

ANALYSE AND APPLY

6. **Explain** why it is important to reflect on what you have learnt in HASS.
7. **Discuss** the meaning of 'evaluating' in the context of HASS skills.
8. **Explain** how delivering an oral presentation for different audiences can affect your communication.
9. **Describe** the progression of HASS skills from primary school to Year 10.

EVALUATE AND COMMUNICATE

10. **Compare** the analogy of baking a cake to developing HASS skills.

Answers and sample responses for this topic are available online.

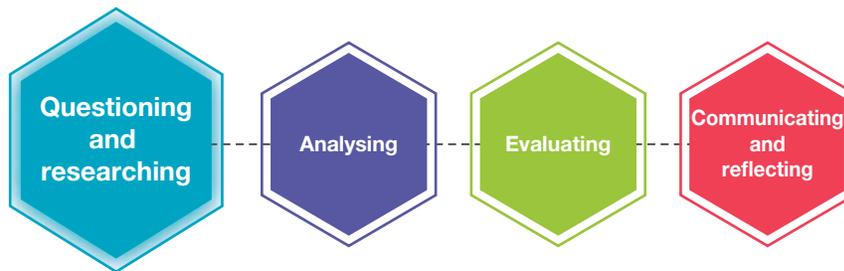
LESSON 1.3 SkillBuilder: Identifying what you need to know

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **identify** what you need to know to develop a focus question.

1.3.1 When to use this SkillBuilder

This SkillBuilder develops your questioning and researching HASS skills. Use this SkillBuilder at **the start** of your inquiry process.



1.3.2 Tell me

Identifying what you need to know means working out what you know and believe about a topic so you can identify what you don't know yet.

In Year 7, you were asked to simply **identify** your existing knowledge and beliefs on a topic, but in Year 8 you will also need to briefly **describe** these and identify some of the perspectives or points of view that other people might have that are different from your own. Describing something well requires attention to detail.

Writing focus questions is an effective way to break a research topic or question down into smaller parts. This helps you to identify what you know or think about each part, and also to consider what other perspectives people might have. Even though this might not be stated in a topic, it is something you are expected to consider.



In Year 8 HASS, the focus of this skill is developing strong, effective focus questions to help you research a topic.

1.3.3 Show me

The following step-by-step process will make it easier for you to develop strong and effective focus questions for your research.

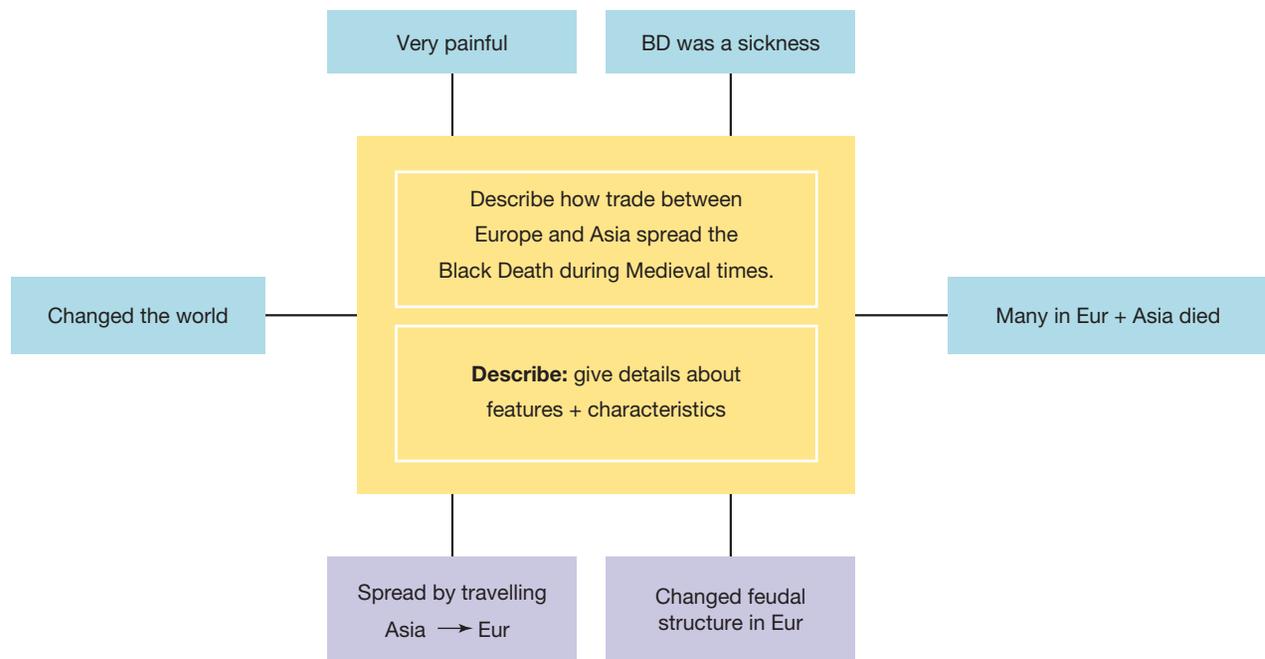
Imagine you have been given the following topic: Describe how trade between Europe and Asia spread the Black Death during medieval times.

Step 1: Identify what you already know or believe

- Find the main idea or event you have been asked to focus on (sometimes rewriting the topic as a question can help you to do this).
- Make a list of key points or ideas that come to mind when you think about the topic.

- List:
 - what you know (fact)
 - what you think you know (possible fact)
 - what you believe (opinion)
 - what others might believe (possible opinion).
- Identify the main verb in the topic — these verbs tell you what you need to do in order to answer the question properly. (Write this in your brainstorm so you remember what the task is.)

FIGURE 1 Brainstorm your key ideas, including what the topic is asking you to do.



WHAT IF I DON'T KNOW ANYTHING?

Remember there are no wrong answers in brainstorming; it doesn't matter if you only write a few words or ideas.

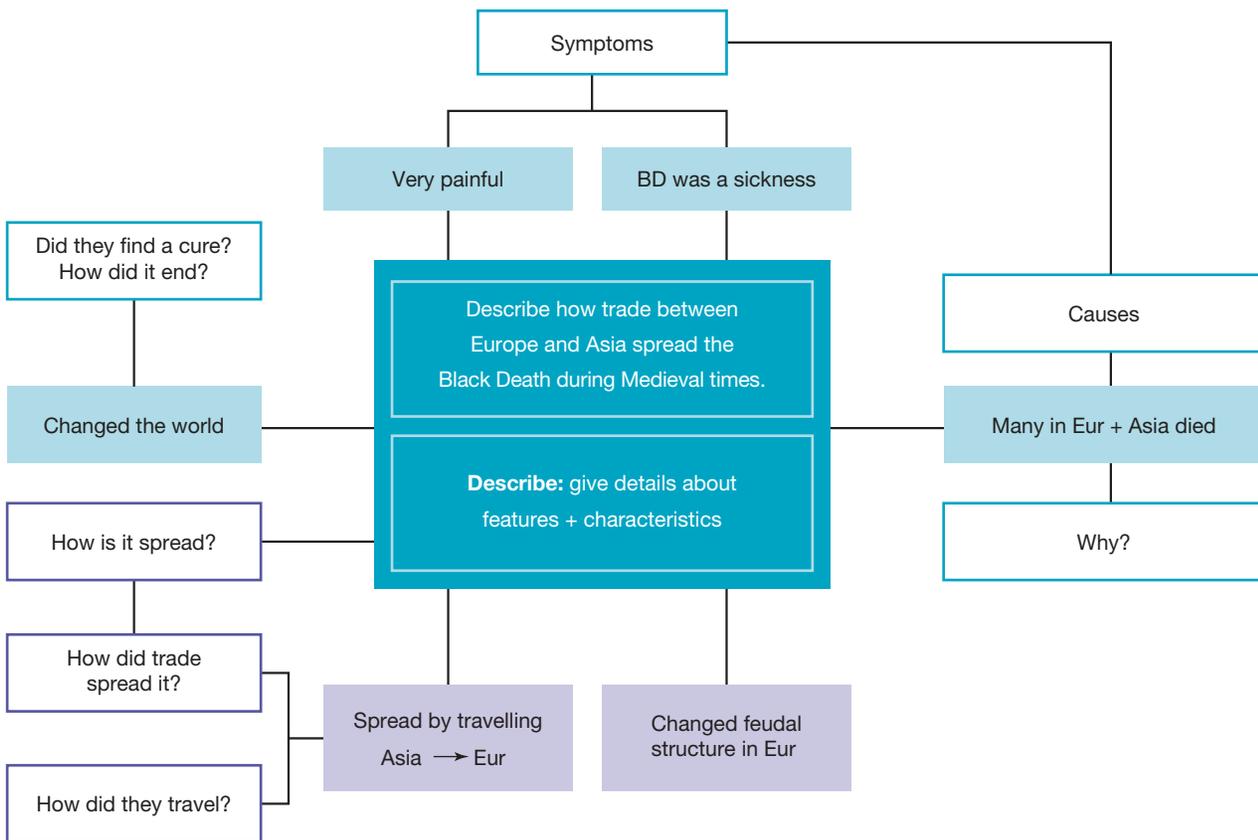
If you feel like you don't know anything about a topic, try some of these tips.

- List any words, people or places that you think might be connected to the topic (add a question mark or circle an idea if you're not sure it's connected).
- Write questions related to each word that you remember (what is that? who is that? where did that happen?).
- Look in the question for clues — you could list *trade*, *Europe*, *Asia* and *Black Death* from this topic.
- Go back to your class notes or text to review some of the headings that remind you of what you have learnt.
- Ask yourself: did I learn something about this last year in HASS? Or do I know about something similar?

Step 2: Identify what you need to know to further your understanding

- Look at your brainstorm or list. What other related things don't you know?
- Use the 5W 1H words (**what**, **where**, **when**, **who**, **why**, **how**) to prompt your memory or find gaps in your knowledge.
 - **What** was it? **What** were the consequences?
 - **Where** was it?
 - **When** did it happen?
 - **Who** was involved?
 - **Why** did it happen? **Why** did it end?
 - **How** did it happen?
- Add ideas or questions to your brainstorm.

FIGURE 2 Add to your brainstorm using the 5W 1H words to prompt questions.



TIPS FOR EFFECTIVE BRAINSTORMING

Brainstorming is for making notes about your ideas; full words and sentences are not needed. It's a handy time-saver to develop your own brainstorming shortcuts for common words.

- Use abbreviations and initials; for example, in **FIGURE 1** Europe is abbreviated to Eur and Black Death is shortened to BD.
- Use symbols: +, =, →
- Important points can be underlined or highlighted.



Step 3: List what you know and what you need to find out

Re-read the question carefully.

- Consider the *verb* in the question. What is it asking you to do? For example, in this case you are being asked to 'Describe how'. This means you need to give details: characteristics, features, trends, timeframes and methods of spread.
- Highlight the key topic terms. These are the main things you need to give details about. There are two key phrases here:
 - trade between Europe and Asia (in medieval times)
 - spread of the Black Death.

In this case, your list of focus questions should include questions about the characteristics of the disease that helped it to spread, and details of how people traded at that time that helped Black Death to spread.

Based on your careful reading of the topic, use your brainstorm to create a table summarising what you know and what you will need to find out to answer the question. Target the specific things that the question asks about. Notice in the example in **TABLE 1** that there are some points from the brainstorm that aren't included. Those ideas aren't going to help answer this specific topic, so they have been left off the list.

TABLE 1 A summary of brainstorm ideas

What I know	What I want to know
The Black Death was a sickness that killed many people in Europe and Asia.	How did the Black Death spread — from person to person or some other way?
It was very painful. Lots of people died.	How many people got it? How many people died? (Why? Lack of medicine, no knowledge of how to stop it, easily spread?)
It changed the world at the time.	Who was blamed for the spread? (Did people think it was caused by something else?)
It was spread by people travelling from Asia to Europe.	Where did trade between Asia and Europe start and end? What did they trade? Who were the traders?
It changed the feudal structure of medieval Europe.	How did the Black Death stop spreading?

SHOULDN'T I JUST RESEARCH EVERYTHING IN MY BRAINSTORM?

Researching everything in your brainstorm is not an effective use of your time. Only list ideas from your brainstorm that relate to the topic. Some students fall into the trap of thinking that including greater volumes of information will automatically translate into a better mark, but this is not the case.

When your teacher asks you to research a specific question, they don't want to test your knowledge of the *whole* topic. They are testing your ability to respond to that *specific* topic — one part of that test is whether you can understand the topic well enough to know what *is* relevant, and what is *not* relevant to the question.

Giving irrelevant information in your answers is like responding to the question 'What's your favourite food?' with a half-hour explanation of the history of pizza. It might be vaguely related, but it's not relevant and it wasn't what you were asked.



Step 4: Write a hypothesis

Based on your list of what you do and don't know, write a **hypothesis**.

- With this topic, you are being asked to *describe*, so your hypothesis should be a sentence that summarises your ideas.
- If your topic asks you to come to a decision or argue something, your hypothesis should summarise your point of view.

Hypothesis: Trade spread the Black Death because sick people travelled and spread the illness as they moved around.

WHAT IF MY HYPOTHESIS IS WRONG?

Remember the point of your hypothesis is to focus your research. It doesn't matter if it is right or wrong. Sometimes when your hypothesis is wrong, it leads to much deeper and more interesting research.

Step 5: Review and format your focus questions

Effective focus questions are clear, ordered and cover all parts of the topic you need to answer.

- Use the 5W 1H process again to break down what you need to research.
- Try to include at least two or three questions for each part of the process.

TABLE 2 Build your focus questions to cover all areas of your research topic.

What	Where	When	Who	Why	How
What is the Black Death?	Where did the Black Death start?	When did the Black Death start?	Who was impacted?	Why did it spread?	How did people try to stop the Black Death?
What were the symptoms?	Where did it travel to?	When did it end?	Who were the main traders?	Why didn't they just stop trading?	How did the disease spread?
What was done to prevent the Black Death?					

WHAT IF MY QUESTIONS CHANGE WHEN I START RESEARCHING?

Your questions will often change as you go deeper into a topic. If you are halfway through your research and come up with more questions or you need to ask different questions, update your table.

You may not develop the most effective focus questions at the beginning. This is a circular process: think, list, question, check, think, list, question, check . . .



1.3.4 Let me do it

1.3 SkillBuilder activity 1 QUESTIONING AND RESEARCHING

Once you are comfortable with the 5W 1H process, try this approach to writing focus questions that go a little deeper into a topic. Focus questions can be divided into three basic types:

- **Literal questions** are where you find information such as dates, names and locations. These are generally 'who, when, where, what' questions.
- **Inferential questions** are designed to help you find information not specifically in the text, so you need to read the information and make deductions about what it is saying. These are generally 'how and why' questions.
- **Evaluative questions** are designed to help you make decisions and draw conclusions about what you are reading. They help you find problems and create possible solutions. These are generally questions that can begin with 'Do I think . . .?' or statements that start with 'I wonder if . . .'

Examples of these questions include:

Literal	Inferential	Evaluative
What is the Black Death?	How was the Black Death spread?	Do I think trade caused the spread of the Black Death?
Who was impacted by the Black Death?	Why did the disease have such a significant impact?	Do I think this same thing could happen now?
When did it happen?	Why did it spread?	I wonder if the disease would have spread if no one travelled?
Where did it happen?	How did it end?	I wonder if there were other factors that had a big role in spreading it?

Add some evaluative questions to your list of focus questions.

1.3 SkillBuilder activity 2 QUESTIONING AND RESEARCHING

Practise your skills at identifying perspectives and knowledge with the following activities.

- Follow the short version of the steps in the **Review** at the end of this topic.
- Follow the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Write a series of focus questions to guide your research of this topic:

Describe how laws are made in Australia.

Economics and Business

Write a series of focus questions to guide your research of this topic:

Describe the rights and responsibilities of businesses and consumers. Find a case study where consumer rights have not been met.

Geography

Write a series of focus questions to guide your research of this topic:

Choose a landform in Australia, such as Uluru. Identify and describe the spiritual and cultural connections people may have to this place.

History

Write a series of focus questions to guide your research of this topic:

Describe how crime and punishment stayed the same and how they changed over the medieval time period.

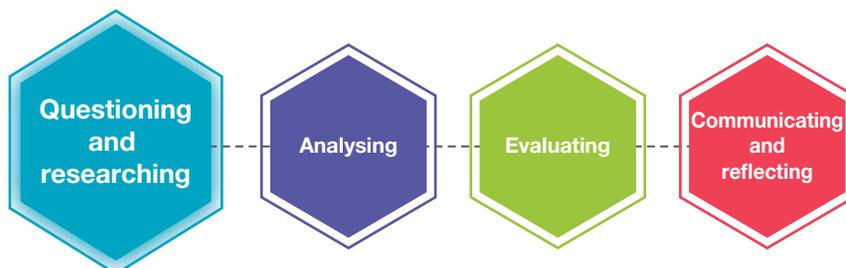
LESSON 1.4 SkillBuilder: Collecting, recording and organising information

LEARNING INTENTION

By the end of this SkillBuilder you should be able to clearly record and organise information from different sources.

1.4.1 When to use this SkillBuilder

This SkillBuilder develops your questioning and researching HASS skills. Use this SkillBuilder **after** you have closely examined your task, written your focus questions and written your hypothesis. Use this SkillBuilder **as** you start looking for sources of information.



1.4.2 Tell me

The collecting, recording and organising information skill involves finding sources of information to answer your focus questions and fill in the gaps in your knowledge about a topic with **reliable**, **useful** and **accurate** sources.

There are many different types of sources, including websites, books, newspapers, statistics and maps. Some sources are more reliable and accurate than others, so you should never use a source unless you know it can be trusted. For example, a person might write their opinion of an issue in a blog. If they have not provided evidence for that opinion, how do you know it is worth believing?

GOOD RESEARCHERS STAY FOCUSED

It might sound obvious, but to answer your research focus questions, you need to find sources that answer your questions. Don't be distracted by irrelevant information. If nothing in a source relates to your focus questions, move on.



How do you know if the facts are correct? The person who wrote them might have been paid to express a specific view or they might have formed their opinion without much knowledge of the topic. In contrast, a post written on the website of an academic organisation with a good reputation for research will have evidence and other sources to support what they are saying about the topic or idea.

Good researchers know how to identify trustworthy information sources, and do not rely on data or information that they cannot verify as very likely to be reliable and accurate — no matter how relevant it might seem. You will also need to use both **primary sources** and **secondary sources**.



In Year 8 HASS, the focus of this skill is clearly recording and organising information for a range of source types to help you research a topic.

1.4.3 Show me

Let's use our medieval Europe topic from section 1.3.3 to get us started: Describe how trade between Europe and Asia spread the Black Death during medieval times.

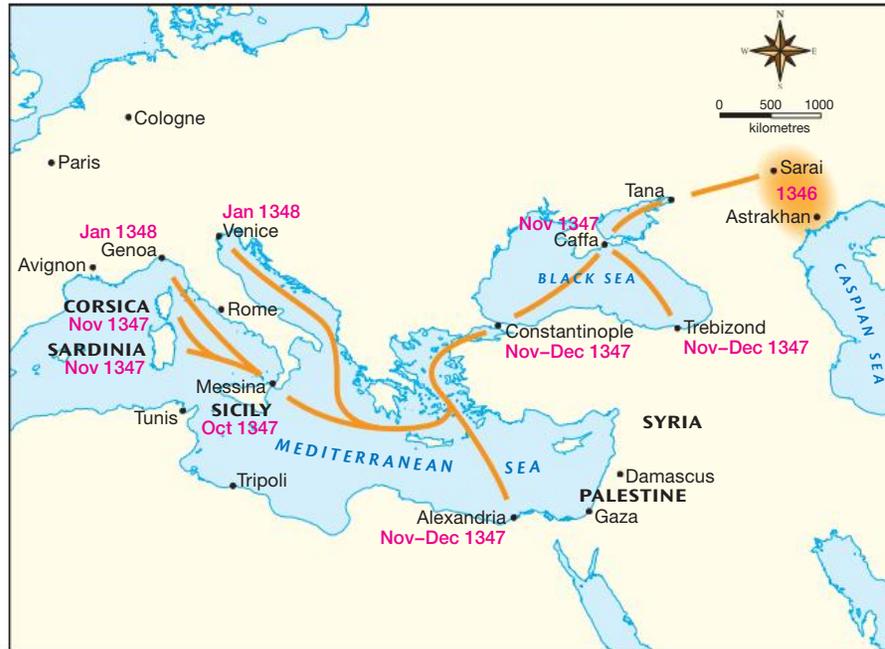
Step 1: Complete a quick assessment of each source that looks useful

When you search for information using your focus questions, a lot of sources will be available, so you need to develop the skill of quickly vetting (testing) a source before you spend too much time reading and making notes from it — you're developing a radar to detect misinformation and poor research.

When you think you have found a source that might be useful, complete a quick test of whether it is likely to be reliable and accurate before you read or examine it in detail. At this stage, you are looking for signs to immediately discount a source. Ask yourself questions such as:

- Where did the source come from and who wrote it? (Is it reliable?)
- Where did the authors get their information? (Is it accurate?)

FIGURE 1 Merchants and soldiers returning from Caffa in late 1347 soon spread the Black Death to the Middle East, North Africa and Italy.



Source: Darlington, R., Mraz, J., Smithies, G. & Richardson, M. (2018) *Jacaranda Humanities and Social Sciences for Western Australia 8*. Brisbane: John Wiley & Sons

Where did the source come from and who wrote it? (Is it reliable?)

- It came from a textbook from a well-known international publishing company.
- The book was written by named authors who are Humanities and Social Sciences teachers.

Where did the authors get their information? (Is it accurate?)

- A range of other sources confirm the information in the map.
- The sources of the information are listed in the textbook.

Based on this information, we can say this source seems very reliable and accurate, so we can continue looking at it to see if it is also genuinely useful, or whether it just seems to be useful at a glance.

Look at the main features of the source to assess whether it seems relevant to your topic and focus questions. For example, for visual sources, you might consider the following.

TABLE 1 Features to consider when you are assessing a source

Type of source	Features to consider
Maps	<ul style="list-style-type: none"> • The title and key — do they seem related to your topic? • Location and scale — does the map cover the place and period of time you are being asked to consider?
Photos or illustrations	<ul style="list-style-type: none"> • Caption — does it seem related to your topic? • Visual elements — does the content seem directly relevant to your topic or focus questions?
Diagrams or charts	<ul style="list-style-type: none"> • The title — does it seem related to your topic? • The labels and features — does the data relate to the topic within the timeframe and place you are being asked to research?

Once you have determined that the source is likely to be relevant, which **FIGURE 1** definitely is, read it carefully and make notes on the details you have found that help to answer the topic.

What information did I learn about my topic?

- The Black Death began in Sarai in 1346 and spread west. It landed in Venice and Genoa in January 1348.
- The Black Death spread a long way in two years.
- The arrows show that the disease was spread by sea — most likely by shipping routes — which means sailors on ships were sick and when they docked at ports they infected the locals.

Step 2: Collect reliable and accurate information from a variety of sources

You should always use multiple sources in your research. In this case, you will need other sources in addition to the map because it hasn't answered all of your questions, and it raises even more questions. For example, did people travel overland? What happened when the disease arrived in Genoa and Venice?

Sometimes you might need to interrogate (question and examine closely) a source more closely before you can judge whether it is reliable, accurate and useful. Use the 5W process to assess the reliability and accuracy of a source more completely.

Consider **FIGURE 3** and how the 5W test has been applied to assess its reliability and accuracy in detail.

You will need to look carefully for some of this information but taking the time to check carefully is better than including incorrect or biased information in your research. For example, you need to read the 'About Us' section of ThoughtCo to learn that the contributors are teachers, academics and researchers — reliable, knowledgeable writers.

You can now make the judgement that the article is reliable and likely to be accurate. It is also useful because it answered some of the focus questions that the map had not answered in detail: how the disease spread, and how people tried to stop it.

FIGURE 2 Prompt questions for using the 5W questions to interrogate your sources

What	<p>What is the source?</p> <ul style="list-style-type: none"> • What kind of source is it: for example, a website article, a report, a photo, a poster, a tv show, a painting? • What information does it give you? Is this backed up by other sources you have found?
Who	<p>Who created it?</p> <ul style="list-style-type: none"> • Was it created by someone with expert knowledge (e.g., a specialist in the topic, someone who was there) • Was it created by a group who have something to gain from you believing them?
Why	<p>Why was it created?</p> <ul style="list-style-type: none"> • Was it created to make you think a certain way? • Was it created to be factual and not take sides?
When	<p>When was it created?</p> <ul style="list-style-type: none"> • Was it created close to the event? • Is it recent? Might it be out-of-date?
Where	<p>Where was it created?</p> <ul style="list-style-type: none"> • Was it created in a place that is related to the topic or written a long way away where people might have not been able to do their own research? • Was it created in a place that is respected for its research? • Was it published in a place where the public could change it?

FIGURE 3 An example of how you might assess a source: The Black Death comes to Europe, thoughtco.com, 30 July 2019

The Arrival and Spread of the Black Plague in Europe

1347: The Black Death Comes to Europe

The first recorded appearance of the plague in Europe was at Messina, Sicily, in October of 1347. It arrived on trading ships that likely came from the Black Sea, past Constantinople and through the Mediterranean. This was a fairly standard trade route that brought to European customers such items as silks and porcelain, which were carried overland to the Black Sea from as far away as China.

As soon as the citizens of Messina realized the illness that had come aboard these ships, they expelled them from the port. But it was too late. Plague quickly raged through the city, and panicked victims fled, spreading it to the surrounding countryside. While Sicily was succumbing to the horrors of the disease, the expelled trading ships brought it to other areas around the Mediterranean, infecting the neighboring islands of Corsica and Sardinia by November.

Meanwhile, the plague had traveled from Sarai to the Genoese trading station of Tana, east of the Black Sea. Here Christian merchants were attacked by Tartars and chased to their fortress at Kaffa (sometimes spelled Caffa). The Tartars besieged the city in November, but their siege was cut short when the Black Death struck. Before breaking off their attack, however, they catapulted dead plague victims into the city in the hopes of infecting its residents.

What is the source? thoughtco.com website article

What information does it provide? Reactions of people to Black Death, first recorded appearance, trade route details (supported by other sources and references in article)

Who created it? Melissa Snell, historical researcher

Why was it created? Factual information for school research

When was it created? 30 July 2019, not close to the event but recently updated

Where was it created? Not close to place or time of the event, but the website editors review and edit for facts and research quality of information; content is not able to be changed by public.

CAN I USE WIKIPEDIA OR CHATGPT?

These can be an easy starting point but remember they are not always reliable. Any information gathered should be checked against at least one other source to make sure it is accurate. To help ensure that your information is correct, use at least two sources to answer each question.

You also need to be guided by your school's rules about the use of generative AI tools such as Microsoft Copilot and ChatGPT. The most useful research information on Wikipedia is something you may never have looked at. If you scroll down through a Wikipedia entry, you will usually find sources listed at the bottom. These are the sources the authors have used to write the Wikipedia page. These sources will include primary and secondary sources, written by researchers and experts. They are often more reliable than the Wikipedia page itself.



Step 3: Make notes in your own words

When you have decided that your sources are accurate and reliable, highlight and make notes of the information that is useful. Often, to make sure you understand everything, you will need to read or examine a source more than once.

For **FIGURE 3** your notes might include:

- BD started in Asia → west to Eur
- Took 2 years to reach Eur
- Sailors spread disease – came ashore ill
- Townspeople: tried to keep infected ships out – BD spread anyway

As you can see, the information is summarised and has been written in different words from the article. It also uses short forms of words and symbols instead of full sentences. For help with making notes in your own words, go to SkillBuilder: Using the deconstruct–reconstruct method in lesson 2.5.

DO I REALLY HAVE TO GO THROUGH A SOURCE MORE THAN ONCE?

If you decide a source is reliable, accurate and useful after your first assessment, you will need to critically examine it to extract the information you need. To critically examine a source means to think carefully about it, to consider all the information in depth.

Taking shortcuts with this part of the process means you might misunderstand or misuse the information you have found. The first pass or skim of a source is only to determine if it is worth using.



Step 4: Organise your notes

Clear and organised notes will help you find specific details later when you are writing your answers.

- Use diagrams or tables where appropriate.
- Use headings to divide the information you find in each source. (Using your focus questions as headings makes it easier to see which questions you need to research further.)
- Always record the details of a source with the notes you have taken.
- When you are satisfied that you have found the answers to all the questions, collect the information about each focus question together.

Step 5: Follow ethical protocols or rules

One of the most important rules in research is to **cite** all your sources. This means that if you use someone else’s information or ideas, you need to show what, where and how you used their work.

This rule is important because it helps to show you have not broken the first rule of research: do not **plagiarise** even if it is by accident.

- Include all the details for the sources you use with the notes you took from that source.
- Put any information you have used word-for-word in quotation marks, even in your notes.
- List all the places where you got your information (all the sources you used) in a bibliography or reference list.

FIGURE 4 A simple but organised set of notes taken from **FIGURE 3**. You could also use a notation system such as Cornell Notetaking.

The Black Death comes to Europe, Mellissa Snell, thoughtco.com, 30 July 2019
When did BD start?
• first seen in Sicily 1347
• Genoa + Venice 1348
Where did BD travel to?
• BD started in Asia - spread west (maybe from China along the Silk Road?)
• Went to Middle East
• took 2 years to reach Europe - spread by shipping routes on Mediterranean Sea
How did BD spread?
• sailors on ships spread disease –
How did people try to stop BD?
• tried to close ports or keep out ships – but generally too late (so disease spread)
• villagers ran away (fear) and spread disease even more

There are many different systems that are used to show this information. Your school will have a specific referencing format that it uses. One of the most common types in HASS is called Harvard referencing.

TABLE 2 Harvard referencing format

Common reference	How to cite using the Harvard referencing format
Books — one author	Author family name, author first name initial. (Year published) <i>Title of book</i> . City: publisher, page(s) Example: Darlington, K. (2018) <i>HASS is fabulous</i> . Brisbane: John Wiley & Sons
Books — two or more authors	Author family name, author first name initial., author family name, author first name initial. (Year published) <i>Title of book</i> . City: publisher, page(s) (Include all authors in the order in which they are listed on the cover.) Example: Darlington, R., Mraz, J., Smithies, G. & Richardson, M. (2018) <i>Jacaranda Humanities and Social Sciences for Western Australia</i> 8. Brisbane: John Wiley & Sons
Websites with the author listed	Family name, first initial. (Year published) <i>Page title</i> [online], website name. Available at: URL [Accessed: day month year] Example: Snell, M. (2019) <i>The arrival and spread of the Black Plague in Europe</i> [online], ThoughtCo. Available at: https://www.thoughtco.com/spread-of-the-black-death-through-europe-4123214 [Accessed: 21 March 2020]
Website without an author listed	Website name. (Year published) <i>Page title</i> [online]. Available at: URL [Accessed: day month year] Example: HASS in WA. (2021) <i>Developing my skills in HASS</i> [online]. Available at: www.HASSEmporiumWA.com.au [Accessed: 21 February 2020]

1.4.4 Let me do it

1.4 SkillBuilder activity

QUESTIONING AND RESEARCHING

Practise your skills at collecting and organising information with the following activities.

- Follow the short version of the steps in the **Review** at the end of this topic.
- Follow the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Find reliable and accurate sources that describe how laws are made in Australia.

Economics and Business

Investigate the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that describe a case study where consumer rights were not met.

Geography

Choose a landform in Australia, such as Uluru. Find reliable and accurate sources that describe the spiritual and cultural connections people have to this place.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how they changed over the medieval time period.

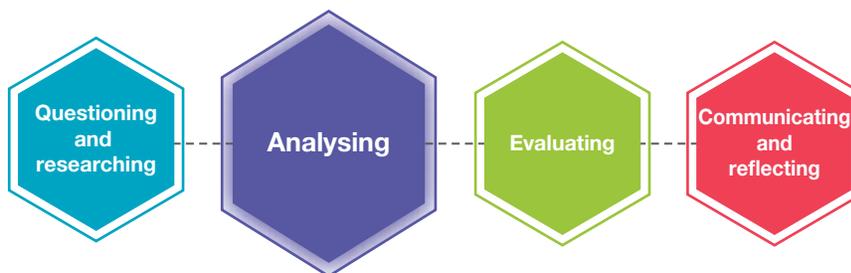
LESSON 1.5 SkillBuilder: Selecting relevant information

LEARNING INTENTION

By the end of this SkillBuilder you should be able to find information that is right for your specific research task.

1.5.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder after you have refined your list of inquiry questions. Use this SkillBuilder **as** you start to make detailed notes from each source.



1.5.2 Tell me

From your research, you have collected sources that are reliable, accurate and generally useful. The first stage in analysing a source carefully is examining it closely to determine whether the *type* of information is relevant too.

You may have collected a lot of information, but is what you have collected fact or opinion? Are the sources primary or secondary sources?

Analysing begins with processing the information you have found. Ask yourself questions such as:

- What are the facts and ideas?
- What evidence is presented?
- What opinions are voiced?
- What questions are raised?



In Year 8 HASS, the focus of this skill is identifying types of information and assessing their relevance to your task.

1.5.3 Show me

Read **FIGURES 1, 2 and 3** below. Critically examine each to find facts, evidence, ideas, opinions and questions. (You can assume their reliability and accuracy have already been checked.)

Step 1: Examine the task, your notes and sources

To answer a question well, you need to pick the information about the topic that is relevant, but you also need to pick the type of information that helps you to answer the question in the way it has been asked. For example, answering a question that asks you to *describe a process* requires you to find facts and examples of how the process works. A question that asks you to *discuss the effectiveness of a process* requires you to provide points for and/or against the process, so you will need to know how the process works, but opinions about how effective it is will be more relevant to the question.

UNDERSTANDING TYPES OF INFORMATION



- You can break information down into three categories:
- **Facts:** information that is objectively true (not influenced by opinion or feelings)
- **Opinions:** a point of view or perspective that may be subjective (based on personal feelings rather than fact) or objective
- **Questions:** issues or problems that are raised but not answered

What separates fact from opinion?

The difference between fact and opinion is that a fact can be proven to be true. Always be careful of opinions that are presented as facts and information that is presented without any supporting evidence. Sometimes it is very difficult to identify an opinion that has been disguised as a fact.

- **Evidence:** information that is used to show why a hypothesis, opinion or explanation is correct. When you analyse evidence, consider two things:
 - Can it be verified (proven to be true)?
 - Does it really show that the hypothesis, opinion or explanation is correct?

Look at your notes to determine:

- What are the **facts**?
- What **evidence** is presented?
- What **opinions** are voiced?
- What **questions** are raised?

Summarise, label or organise the information based on its type.

FIGURE 1 'Freedom of speech in Australia', Darlington, Mraz, Smithies & Richardson, *Jacaranda Humanities and Social Sciences 8 for Western Australia* 2nd edition, John Wiley & Sons, 2018

1.3.1 The importance of freedom of speech

One of the key freedoms enjoyed by Australians is freedom of speech. In most cases, we have the freedom to express our opinions publicly. However, there are some legal limits on freedom of speech. This is because our right to free speech must be balanced against the rights of other people who may be harmed by what we say.

For us to be able to exercise our democratic rights in a free society, we must have the right to express our opinions without risk of punishment. In many countries around the world, and throughout history, this right has not always existed. In some medieval societies, anyone who publicly criticised the king or the church could be executed. Even today, there are many countries where freedom of speech is very limited or non-existent, and people are punished for publicly expressing their opinions.

Australians highly value the right of free speech.



FIGURE 2 Free speech and free press around the world: North Korea, Lisa Sargent, 30 April 2013, freespeechfreepress.wordpress.com/north-korea/

In the nearly 70 years of North Korea's existence, little information has been known about the country until the great famine (also known as Arduous March) of 1995. Yet even with that, all of the current knowledge we have obtained on North Korea is not provided by the government but comes largely from North Korean defectors and South Korean advocates. Though any information on speech restrictions in the country before Arduous March is extremely difficult to find, there have been several recent incidents of governmental suppression.

In 1989, Kim Young Soon, now a North Korean defector, was sent to Yoduk, one of North Korea's political prisons, after claiming Sung Hae Rim was the mistress of Kim John-Il [sic] and had his child. Though her statements were true, the government charged her with spreading rumors, claiming that doing so was defamation of the government.

In 2009, Korean-American missionary Robert Park was imprisoned for illegally entering North Korea to draw attention to the country's human right issues. Park was released in February 2010 and sent back to America. Though he remains silent about the incident, it's been reported that he was brutally tortured.

In January 2010, the public execution of North Korean factory worker arose after he called someone in South Korea to discuss North Korean rice prices.

Following the death of Kim Jong-Il in December 2011, North Korean citizens were required to mourn. Those who failed to display sadness were punished by the government. North Korea denied the allegations.

Such punishments and radical restrictions such as these are exceedingly common. However, even those who have defected from North Korea are subject to the country's strict grip. In 2009, Hwang Jang Yop, the highest-level ranking North Korean official to ever defect to South Korea, was the target of an assassination attempt by two North Korean spies pretending to be defectors. Despite the high risk of being severely reprimanded for speaking out against the government or for obtaining outside information, 98 percent of North Koreans have received information not available in the North Korean market through word of mouth from trusted family and friends.

FIGURE 3 'Freedom of speech' from North Korea 101: The people's challenges, Liberty in North Korea, libertyinnorthkorea.org/learn-nk-challenges/

No Freedom of Speech

Criticism of the regime or the leadership in North Korea, if reported, is enough to make you and your family 'disappear' from society and end up in a political prison camp. It goes without saying that there is no free media inside the country. The only opinion allowed to be voiced inside the country is the regime's.

TABLE 1 Summarising the types of information in your sources in note form

Type of information	FIGURE 1	FIGURE 2	FIGURE 3
Facts	<ul style="list-style-type: none"> • Aust law limits freedom of speech • Some countries do not allow free speech (now and in past) 	<ul style="list-style-type: none"> • Limited info about Nth K before 1995, most from defectors since 	<ul style="list-style-type: none"> • Restrictions placed on media and free speech in Nth K
Evidence	—	<ul style="list-style-type: none"> • 1898 Kim Young Soon sent to prison for 'defaming govt' • 2009 Robert Park (Sth Korean) sent to prison for discussing poor human rights in Nth K • 2010 factory worker killed for phoning someone in Sth K to 'discuss rice prices' • Nth K people 'required to mourn' • 2009, Nth K attempted to kill Hwang Jang Yop • 98% Nth K people get info from outside 	<ul style="list-style-type: none"> • People who criticise govt are put in prison if they are reported (and their family)
Opinions	<ul style="list-style-type: none"> • Aussies value free speech • Free expression of views is vital in a free democracy • Limiting free speech a little is needed to protect people 	<ul style="list-style-type: none"> • Govt suppresses people • Punishment for speaking out is common 	—
Questions	—	—	—

Step 2: Separate the kind of information you need

How you separate the kind of information you need will depend on the task you have been asked to complete. For example, if you have been asked to describe, you will need details about the features and characteristics. If you have been asked to discuss opinions on an issue, you will need to isolate the opinions. The key to this step is understanding the verbs (or actions) in the task you have been given because each action will require a slightly different type of information.

TABLE 2 Common verbs in HASS tasks and exercises

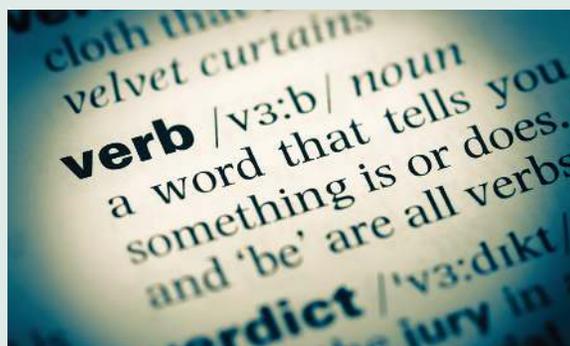
Task verb	Meaning	Example	Requires
Identify	Recognise and name.	Identify a country that restricts freedom of speech.	Basic facts (names)
Define	State the meaning and identify essential qualities.	Define 'freedom of speech'.	Facts (definition)
Describe	State the characteristics and features.	Describe punishments for North Korean citizens who criticise the government.	Facts and evidence (characteristics and features with detail)
Outline	Describe in general terms; indicate the <i>main</i> features.	Outline how the North Korean government punishes citizens who criticise it.	Facts (main features, general)
Summarise	Concisely state the relevant details.	Summarise the ways in which Australians' freedom of speech is limited.	Facts and evidence (listed)
Compare	Show how things are similar and different.	Compare freedom of speech laws in Australia and North Korea.	Facts, evidence and opinion (similar and different aspects and views)
Explain	Show cause and effect; make relationships between things clear; show why and/or how.	Explain why a North Korean citizen might be afraid to defect.	Facts, evidence and opinion (show why)
Discuss	Identify issues and provide points for and/or against.	Discuss how freedom of speech is limited in Australia.	Facts, evidence and opinion (identify issues for and against)
Predict	Suggest what might happen based on available information.	Predict the consequences of Australia removing limits on free speech.	Facts, evidence, opinion and some questions (questions in a source might provide tips for what may happen)
Propose	Present a point of view, idea, argument or suggestion for consideration or action.	Propose how you might protect a North Korean citizen who defects to Australia.	Facts, evidence, opinion and questions (suggesting a course of action)

UNDERSTANDING QUESTION VERBS

Use your questioning and researching skills to find a country where the citizens do not have the right to free speech.

Find one reliable source that discusses Australia's right to free speech and two sources that discuss the free speech (or lack of) in your chosen country.

Based on the information in these sources, write a series of ten HASS inquiry questions using the verbs in **TABLE 2**.



1.5.4 Let me do it

1.5 SkillBuilder activity ANALYSING

Practise your skills at categorising information to assess what is most relevant to the task with the following activities.

- Follow the short version of the steps in the **Review** at the end of this topic.
- Follow the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia.

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may have to this place.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how they changed over the medieval time period.

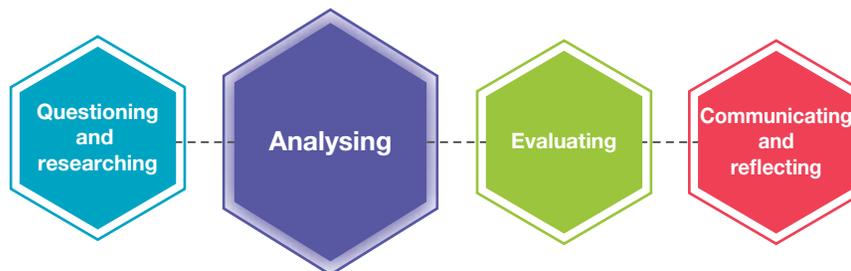
LESSON 1.6 SkillBuilder: Identifying patterns and relationships

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **analyse** patterns and links in your information and data.

1.6.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder **after** you have made notes from reliable sources. Use this SkillBuilder **to begin planning** your response.



1.6.2 Tell me

HASS tasks and exercises often require you to examine trends and connections. For example:

- identify whether there is any relationship (e.g., a connection, such as cause and effect) between the ideas and/or facts
- suggest what relationships or connections a data set shows
- suggest what trends or patterns a data set shows
- suggest what different or similar views (perspectives) are shown or suggested.



In Year 8 HASS, the focus of this skill is accurately identifying links (similarities or differences) and patterns.

1.6.3 Show me

Step 1: Identify any relationships or trends

Look at your notes carefully. Can you see any connections in the information? Are there similar events that happened at different times or events that had follow-on effects or started a chain reaction? These connections are called **relationships**.

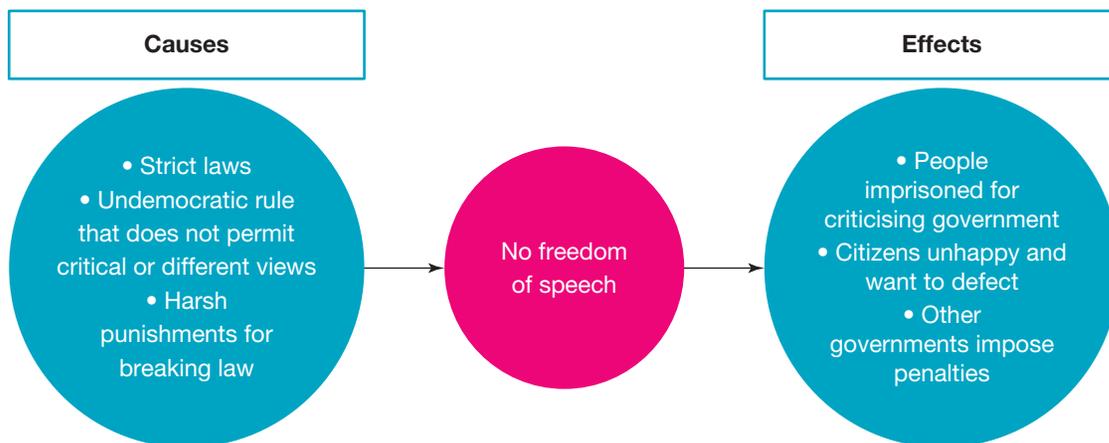
A **trend** is a pattern of change over time — for example, changes in growth, direction, size, frequency of occurrence, reactions, cost, beliefs or any other aspect of human society or the natural environment.

Cause and effect

Every event or action has follow-on effects, which are likely to be the cause of subsequent effects or consequences. Being able to identify patterns of **cause and effect** is an essential skill that allows us to explain how and why things happened, happen or might happen in the future.

It is important to understand that not all causes leading to a specific event are equally significant — some causes may have more influence than others.

FIGURE 1 Restricted freedom of speech: cause and effect



You will find examples of cause-and-effect relationships in all HASS subjects:

- Civics and Citizenship: Committing a crime leads to arrest and punishment.
- Economics and Business: Selling your products cheaply leads to increased demand.
- Geography: Climate change has led to higher temperatures, more extreme weather conditions, rising sea levels, flooding and increased cyclonic activity in some areas of the world.
- History: The spread of the Black Death led to at least a third of Europe's population dying within a four-year period.

SkillBuilder discussion

Analysing

Consider **FIGURE 1**, which shows some of the causes and effects of a government not allowing its citizens to have freedom of speech.

- What other causes might lead to free speech being restricted in a society?
- In your view, what are the most significant causes?
- What other effects might result from restricted free speech in society?
- In your view, what is the most significant effect?



Change over time

Change refers to something that is different from what has occurred in the past. This may occur over a long period of time and, in this case, it may be difficult to detect the precise moment of change. Change can also occur dramatically or suddenly.

You might be asked to compare events occurring at the same time, historical periods of time, or the present and the past. For example, **FIGURES 2** and **3** show views of the skyline of Perth in 1905 and 2025. You can see clearly that a lot of change has happened in the years between the photos, but there are also some things that haven't changed.

To identify change over time, we compare information to see what is similar and what is different.

SkillBuilder discussion

Analysing

FIGURE 2 Perth from Kings Park, 1905



Observations

- Buildings only have a few storeys or one level (except town hall and churches).
- Houseboats and sailboats are on the river.
- The road along the river is narrow and follows the shore.
- There are many piers/docks next to the city.
- The park covers the whole hillside down to the river.
- The city is next to the river.
- There is smoke (factories?) near city.

FIGURE 3 Aerial image of Perth, 2025



Observations

- City buildings are mostly multi-storey skyscrapers, with smaller buildings outside the CBD.
- City is next to the river.
- Piers are close to the city.
- There are busy roads along the river.
- A park goes the whole way down to the river edge.
- The city spreads out a long way.

Similar

- The city is next to the river.
- Kings Park extends down to the river opposite the city.

Different

- More and much bigger buildings in 2025.
- Some of the river was filled in for Riverside Drive.

Look at the images of Perth in **FIGURES 2** and **3** carefully and discuss the following in small groups or as a class.

How might life have changed or stayed the same in Perth because of the changes you observed in the photos?

What different points of view might people have about these changes?

Trends in graphs and charts

Tables, graphs and charts can provide a wealth of information about patterns and trends — general or overall changes. They clearly and concisely represent a data set visually, which makes any patterns easier to see.

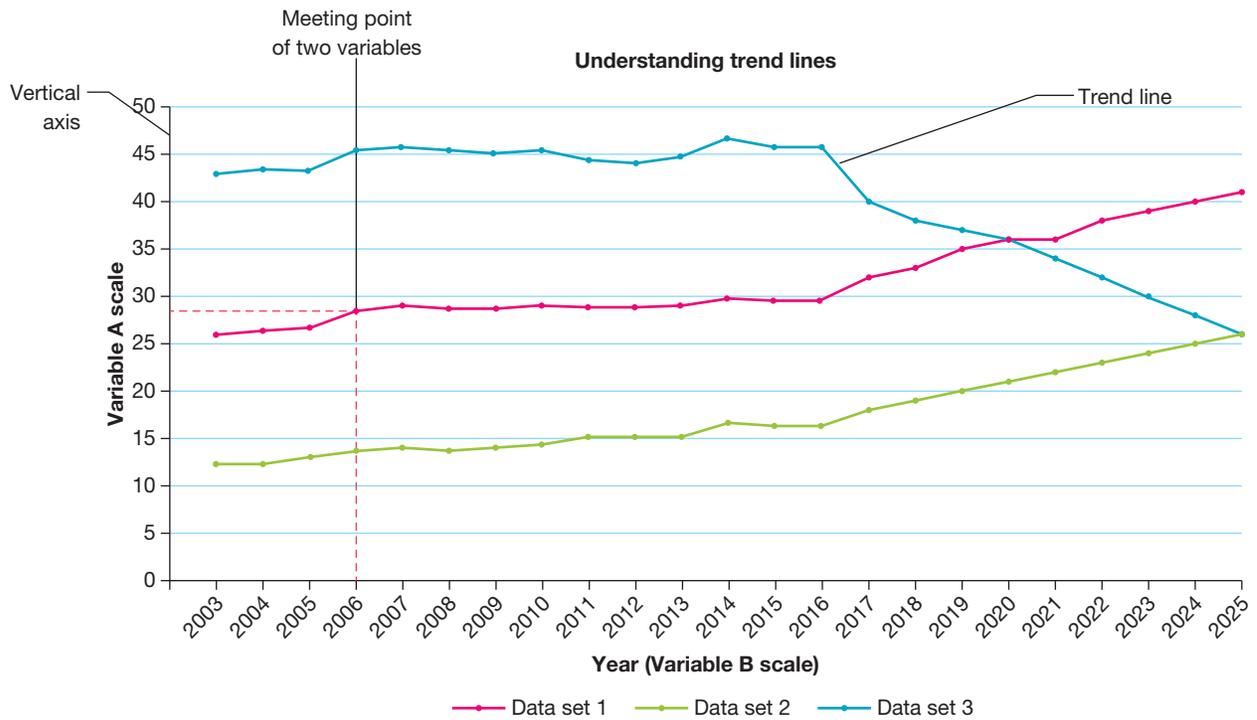
When analysing a graph or chart, consider what each of these features tells you about the data.

- Heading — summarises what data is represented.
- Key — identifies what each of the lines on the graph represents.
- Vertical (y) and horizontal (x) axes — labels identify what variable each axis is showing.

A **trend line** on a line graph shows an overall picture of what is happening — that is, whether a specific variable has increased, decreased or remained steady over time. Examine these lines in **FIGURE 4** closely — what changes are occurring?

For example, the trend line in **FIGURE 4** shows a gradual or slow upward trend for data sets 1 and 2, but after a gradual upwards trend during 2003–2016, data set 3 begins a sharp downward trend.

FIGURE 4 Elements of a line graph



SkillBuilder discussion

Analysing

Examine **FIGURE 5** carefully. It shows the percentage of population growth in four of Australia’s capital cities.

Examine each city’s trend line.

Discuss how you would describe the trends in population growth in each city during 2014–2024 in general.

How does each city compare? Nominate someone in the class to write a list of words you can use to describe each trend line on the board during the discussion.

FIGURE 5 Population growth by city in Australia



* Greater capital city statistical area
Sources: ABS; RBA

Spatial distribution

The term ‘**spatial distribution**’ refers to the way things are spread or distributed across places. It can also refer to patterns or trends, especially when you analyse the way things move, expand or reduce over time.

SkillBuilder discussion

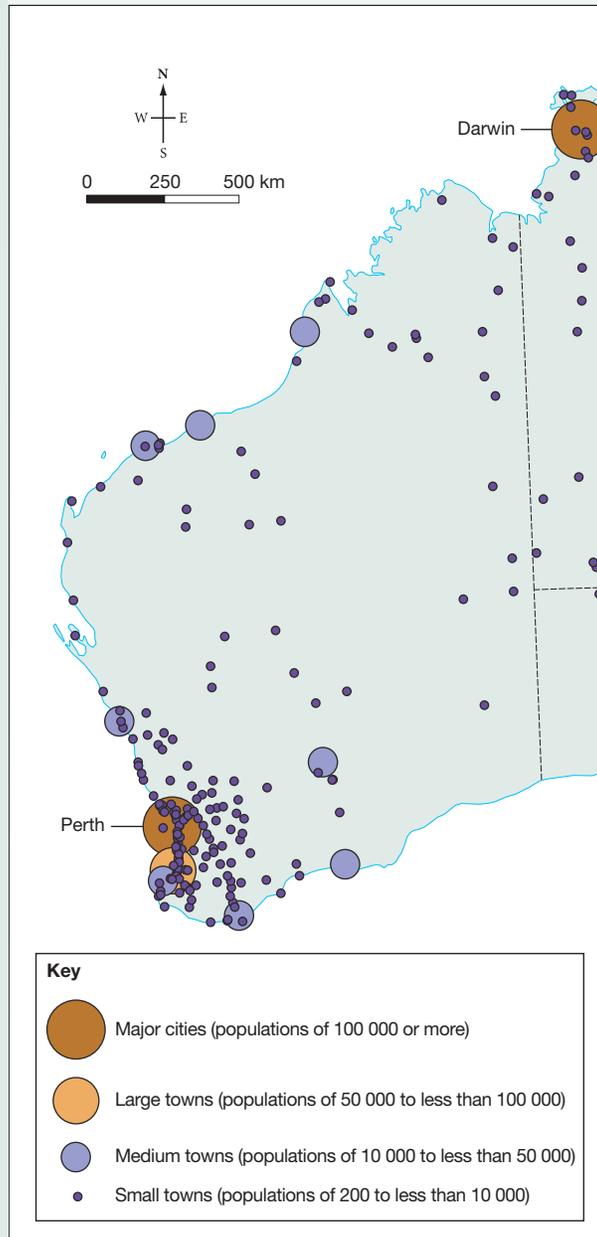
Analysing

FIGURE 6 shows the distribution of people in Western Australia. Before discussing this map as a class, consider these questions individually or in small groups.

- What observations can you make about where people live?
- Might a map from 1916 show a different pattern?
- Predict what a map from 2116 might look like. Do you think the distribution of people will be similar? Suggest reasons why or why not.

As a class, discuss how you would describe the spatial distribution of people in Western Australia based on this map. Write a paragraph describing the distribution together on the board.

FIGURE 6 Distribution of Western Australia's towns by population size, 2016



Source: Australian Bureau of Statistics

Step 2: Identify different perspectives

Your viewpoint is your **perspective**. Other people have their own perspectives or points of view too. When you are researching events, places or people, it is important to find a balance of sources — sources are created by people, and people often have points of view about the information they are presenting.

Use the following questions to help you identify different viewpoints on an issue.

- When was the source created?
- Who created the source and why?
- Who was the intended audience of the source, and how might this have affected its construction?
- What words, gaps in the information or examples give away the writer's view?
- In what ways does the source confirm or rebut what I already know or believe?
- How might the political/social/cultural pressures of the time or place have influenced the creation of the source?

For example, consider the first sentence of **FIGURE 7**, which comments on freedom of speech in North Korea.

FIGURE 7 'Freedom of speech' from North Korea 101: The people's challenges, *Liberty in North Korea*.

Criticism of the regime or the leadership in North Korea, if reported, is enough to make you and your family 'disappear' from society and end up in a political prison camp. It goes without saying that there is no free media.	<ul style="list-style-type: none">• Created 2019• Liberty in North Korea, campaign for freedom in NK• Intended audience not North Korean; purpose to highlight how bad life in North Korea is and to encourage people to donate to help• 'disappear', 'political prison camp'• Confirms belief there is no freedom of speech in North Korea• Published by US organisation working to help people leave North Korea so their whole aim is to make the government there sound cruel and unfair to its people
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Source: libertyinnorthkorea.org/learn-nk-challenges/

Step 3: Explain how viewpoints affect our understanding

Once you have identified and analysed patterns, and analysed the viewpoints in your information, explain how these relationships and viewpoints impact on the way we should interpret the information.

For example, **FIGURE 7** was written by an organisation that believes that the North Korean leadership are oppressing their people. That doesn't necessarily make it untrue, but it is a good demonstration of why using only one source or too many subjective sources might not be the best way to produce balanced research.

1.6 SkillBuilder activity ANALYSING

Consider **FIGURES 8** and **9** carefully.

FIGURE 8 Index of economic freedom 2025, The Heritage Foundation, 2025. The index measures freedom based on 12 factors, including the right to own property, effectiveness of the judiciary, government integrity and business freedom.

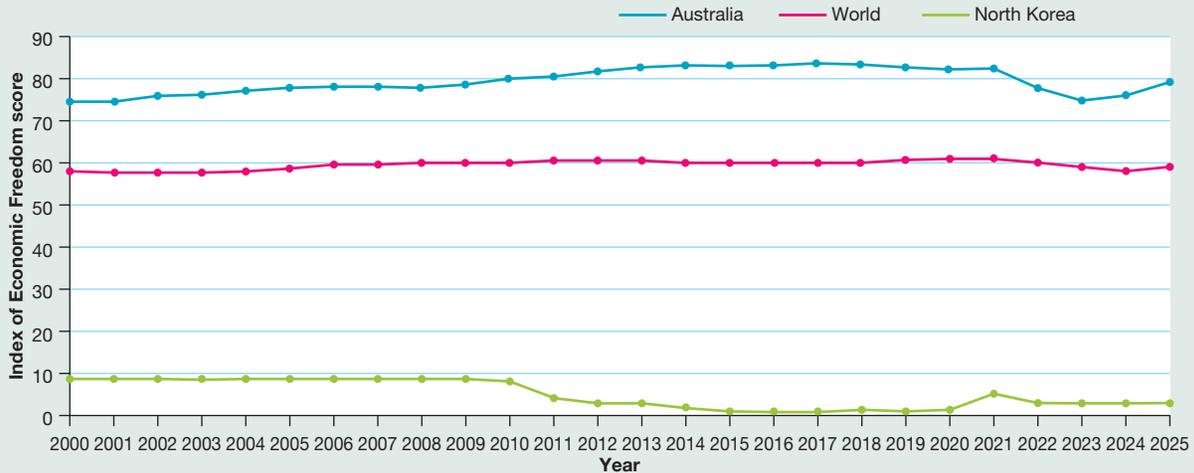


FIGURE 9 World Press Freedom Ranking for North Korea, Reporters Without Borders, 2025

Year	Ranking	Year	Ranking
2025	179 / 180	2021	179 / 180
2024	177 / 180	2020	180 / 180
2023	180 / 180		
2022	179 / 180		

1. What patterns or trends can you identify relating to freedom in North Korea and Australia?
2. Does this information confirm or contradict your view of freedom in Australia compared to other countries?
3. What generalisations about freedom, if any, can we make based on this data? Explain how you came to your conclusion.

1.6.4 Let me do it

1.6 SkillBuilder activity ANALYSING

Practise your skills at analysing patterns and perspectives with the following activities.

- Follow the short version of the steps in the **Review** at the end of this topic.
- Follow the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia, and analyse the patterns and perspectives in the sources you find.

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met, and analyse the patterns and perspectives in the sources you find.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may have to this place, and analyse the patterns and perspectives in the sources you find.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how they changed over the medieval time period. Analyse the patterns and perspectives in the sources you find.

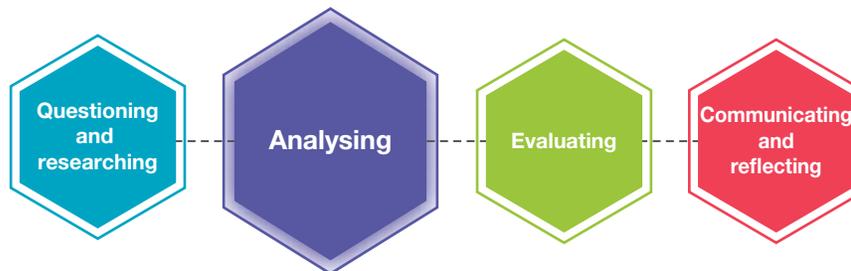
LESSON 1.7 SkillBuilder: Translating information

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **identify** the best way to present your information.

1.7.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder **after** you have examined your information for patterns and relationships. Use this SkillBuilder **to start writing** your response.



1.7.2 Tell me

Translating information into your own words or diagrams helps you understand the information you are learning about, but it also demonstrates to others that you know your topic, not that you're just copying information from others. By using subject-specific words, you are also showing your audience that you understand the information you are presenting.



In Year 8 HASS, the focus of this skill is finding the most effective way to display your information.

1.7.3 Show me

Step 1: Present the information in your own words

Always present information in your own words to show you have understood what is being said and what you have learnt.

While you may have taken care not to copy other people's words in your notes, before you start writing, it is a good time to:

- look up words that you wrote down in your notes but don't really understand
- include all the correct technical or subject-specific terms.

When you draft your writing, use your notes to create your paragraph. You might choose to use copies of charts, graphs or maps created by others, but always cite the information source, just as you would in a bibliography or reference list.

Step 2: Create visuals to show information, if needed

Sometimes you will need to present information and evidence in different ways. This could be to show similarities and differences between relationships, or to present data and statistics that help prove your hypothesis.

What you need to notice in this step is the expression 'if needed'. Sometimes people will make graphs and charts because they look good but actually don't supply the information that is needed to prove the hypothesis. So, if you decide you need a diagram or visual aid, make sure it shows what you intend to show clearly. One informative and clear diagram is much better than several pretty diagrams that don't say a lot.

Even with your own diagrams, charts and graphs, you need to include all the details to show where your information was sourced.

Infographics

An **infographic** gives an overview of a topic or idea using images, charts and small sections of text. They are a collection of information in different formats.

Infographics are useful for giving people small chunks of information in a way that captures their attention. For example, infographics are often used for public information campaigns because they communicate data in a way that most people can easily understand.

An infographic should always include:

- a title that shows the main topic and timeframe
- images that relate to each piece of information
- striking colours or contrasts to grab attention
- large text that can be easily read
- simple language that can be easily understood.

FIGURE 1 The Australian guide to healthy eating is a visual representation of the Australian Dietary Guidelines.



Pictographs

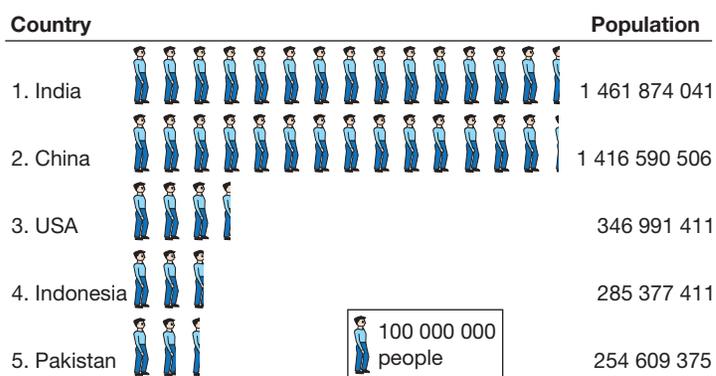
A **pictograph** is a graph that uses pictures to represent numbers, instead of the bars or dots that are traditionally used on graphs. Data can be drawn vertically or horizontally.

Pictographs are useful for simplifying data so people can understand it quickly and easily. For example, you might use a pictograph on a poster to be displayed in a public space, such as a shopping centre, rather than a graph.

A pictograph should always include:

- a title
- a key
- labelled rows of data.

FIGURE 2 Top five countries by population, 2025



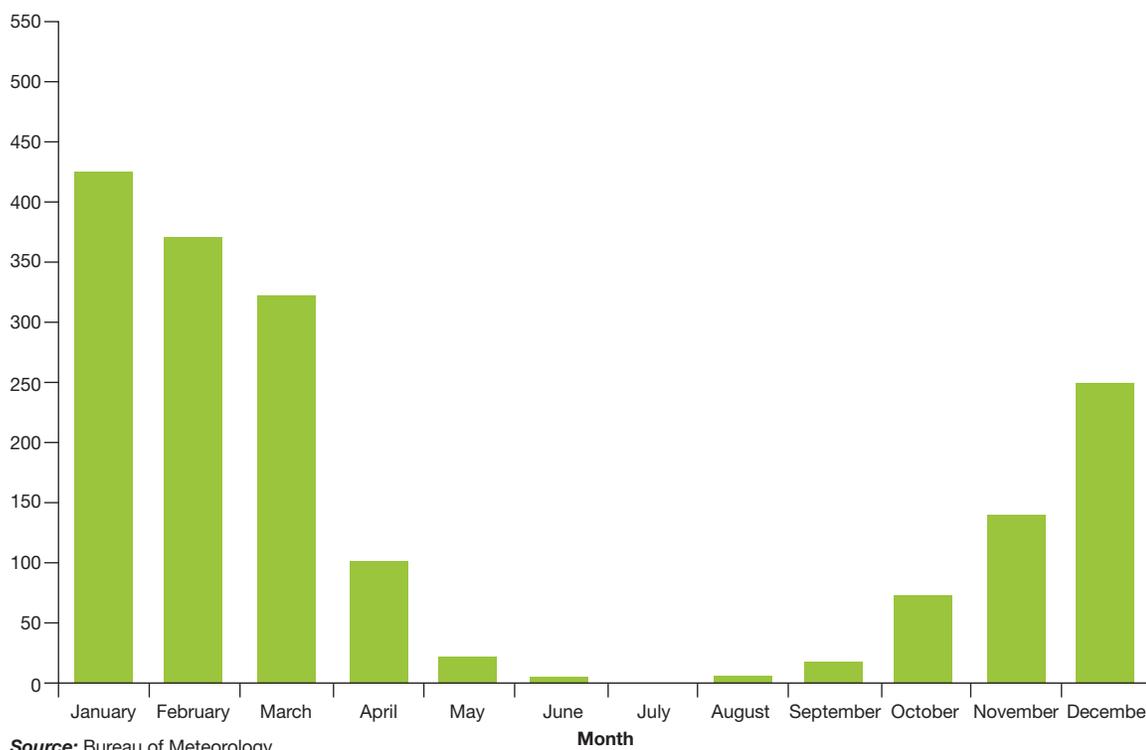
Graphs

Column graphs are useful for comparing quantities. They can help us understand and visualise data, see patterns and gain information. For example, we can use them to help understand rainfall patterns in different months.

A column graph should always include:

- a title
- source information
- ruled and labelled axes
- space between each column.

FIGURE 3 Features of a column graph

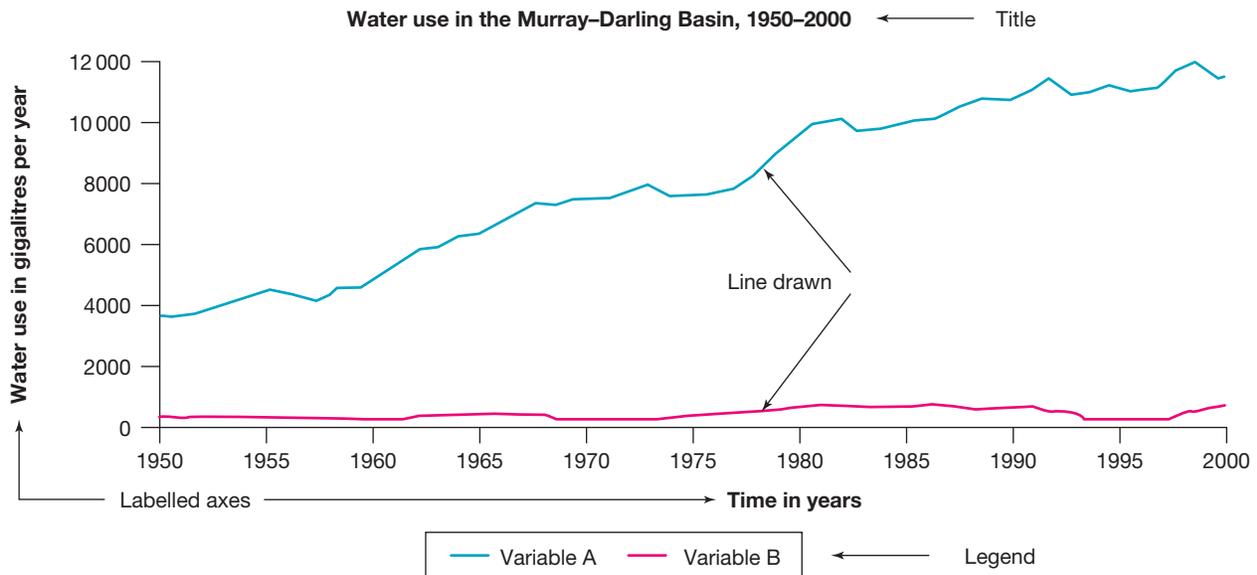


Line graphs are very useful for showing trends (patterns of change over time) and comparing data.

Line graphs should always include:

- an appropriate scale to show the data clearly
- labelled axes
- small dots joined by a line to make a smooth curve
- a legend, if necessary
- a clear and accurate title that explains the purpose of the graph
- the source of the data.

FIGURE 4 Features of a line graph



Source: Include full source details here

1.7.4 Let me do it

1.7 SkillBuilder activity ANALYSING

Practise your skills at finding the right way to show your information with the following activities.

For more help with this activity, you might:

- Follow the short version of the steps in the **Review** at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia and translate the information into a new format.

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met and translate the information into a new format.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may have to this place and translate the information into a new format.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how they changed over the medieval time period. Translate the information into a new format.

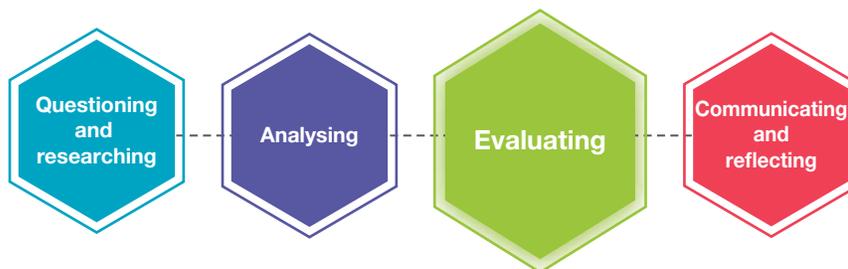
LESSON 1.8 SkillBuilder: Forming conclusions

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **evaluate** evidence to form conclusions.

1.8.1 When to use this SkillBuilder

This SkillBuilder develops your evaluating HASS skills. Use this SkillBuilder **after** you have collected sources that appear to be reliable and useful. Use this SkillBuilder **to start writing** your response.



1.8.2 Tell me

Forming conclusions means making a judgement or decision about what you have learnt, and determining if there are any challenges, issues or problems. Can you see any obvious problems or issues about the topic that require action? Can you think of any solutions that might resolve an issue?



In Year 8 HASS, the focus of this skill is forming an evidence-based conclusion.

1.8.3 Show me

You will have drawn some conclusions from your analysis. You may even have considered the conclusions that other people might draw from the same information.

It may be that you haven't changed your point of view or it may be completely different. You just need to make sure it is an *informed* point of view based on evidence — informed not only by the facts, but also by the way that any action or solutions you suggest will affect other people, places, and human and natural systems. It can be difficult to do this without listening to and empathising with other points of view.

Step 1: Consider your data and information

An approach to problem-solving that relies heavily on numerical data might not provide the best solution to a problem or course of action to take. Humans are varied and complex, so deciding on an approach or action to take needs to take into account a wide range of evidence and perspectives.

The idea of an 'evidence-based conclusion' might sound like you should make your decision based only on **quantitative** data — measurable figures such as financial cost or the number of species that will be protected — but this is not the case. Evidence can also be **qualitative** — reflected in qualities, characteristics and features that are described rather than measured. Qualitative evidence might include

interviews with people discussing how an event affected them or observing and describing how a landscape changes over time.

SkillBuilder discussion

Communicating and reflecting

What decisions in your daily life might you make based mostly on quantitative data? Think of some examples of decisions you might make based only on number-based data such as cost or time.

What decisions in your daily life might you make based mostly on qualitative data? Think of some examples of decisions that you might make based only on what you have heard from other people, read descriptions or reviews of, or seen for yourself and wanted to try.

What decisions in your daily life might you make based on both qualitative and quantitative data?



Large-scale human problems, of the kinds we examine in HASS, are rarely solved by one individual in the 'real' world. Problem-solving and decision-making involve working collaboratively in groups, negotiating and using teamwork to solve an issue and develop a plan for action. A successful democracy and democratic values require collaboration, consensus, participation and empathy because we are interconnected and interdependent.

This means that to come to a strong evidence-based conclusion, we need to work with or listen to the views and perspectives of others. They may have interpreted the situation very differently. Try these steps for a successful discussion about an issue.

- Give each person a chance to express an opinion about the discussion point being considered. Write down each person's key points.
- Do not allow any argument or disagreement until everyone has expressed an opinion on a discussion point.
- Once everyone's opinions on the discussion point have been shared and written down, read out the opinions and discuss them to determine whether or not everyone is in agreement.
- If there is disagreement, allow those on each side of the argument the opportunity to put their point of view to convince the majority. This shouldn't just be restating your point of view or an opinion. The best way to convince people you are right is to be able to support your view (back it up) with strong evidence and reliable expert opinion.
- Seek the maximum level of agreement on each point discussed by allowing people to make some changes to their opinions to accommodate the views of others.

WHAT IF WE CAN'T REACH A CONSENSUS?

If you reach a point where you can't form a conclusion, discussion points that might help you reach one could include:

- What are the advantages and disadvantages for individuals and for our society as a whole?
- What are the advantages and disadvantages for the environment – locally, nationally or globally?
- What will be the advantages and disadvantages in the short- and long-term?
- If a change were to be considered, what are some of the ways you might convince others to support the change?
- If you do not wish to change, how do you convince others to support the current situation?



Step 2: Suggest possible alternatives for action

Using the information and data you have collected, brainstorm lists of solutions or ideas for change. Once you have written as many as you can think of, go back and look at each one. Follow these steps:

- Ask yourself: Would it work — why or why not? Draw on your research to find evidence to support your decision.
- If it wouldn't work or there is no evidence to support an idea, cross it off your list with a brief note explaining why.
- If it would work and you have strong evidence to support the idea, put a tick next to it and a brief reason why.
- If it is a possible but perhaps not a strong option, put a question mark next to it and a brief reason why.

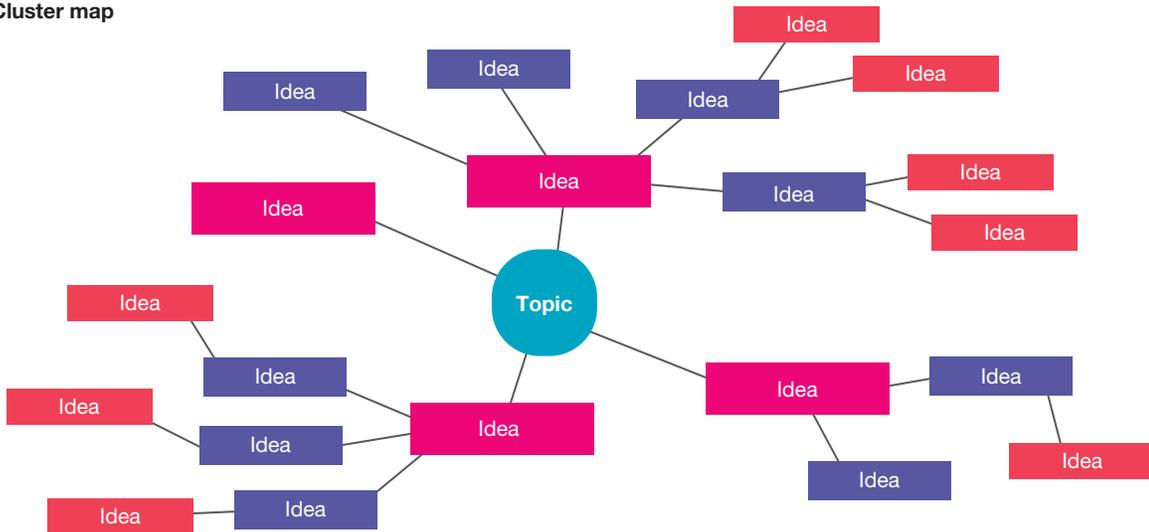
Work through the list until you have solutions or ideas for change that seem possible, then identify the effects these ideas or solutions would have. The effect is the change that would take place if the idea or solution was implemented or the action was taken. These can be positive, negative or neutral (no change).

Decide which of these they would be and briefly explain why. Ideally, good solutions and ideas will have a positive or neutral effect on the problem, and the fewest negative impacts. A negative effect makes the problem bigger or shifts the problem somewhere else.

Drawing a cluster map or mind map can help you to see the potential alternatives that could be the basis of your action plan, or even to map the consequences of historical actions.

FIGURE 1 Cluster maps can show how ideas or action and consequences are connected.

Cluster map



Step 3: Consider whether the effects are worth the consequences

When you have discarded ideas that would have negative effects, it is time to look at the positive and neutral effects of the remaining solutions. This is when you ask yourself: 'Is it worth it?'

How will people and the environment involved be affected or changed? If the change is positive, then it is worth the consequences. Sometimes, if the effects are neutral, you need to think about if it is worth implementing the solution at all. Over time will the change become positive or negative?

One way of doing this is to create a PMI chart.

- The **P** is a listing of all the ‘pluses’.
- The **M** is a listing of all the ‘minuses’.
- The **I** is a listing of what is still ‘interesting’ — the questions or ideas that you know are important or relevant, but you can see how they might fit on both the P and the M sides. (These are often the ‘grey areas’ that might not have an answer at all. They might be both positives or negatives, depending on perspective.)

For example, would the strategies that people employed to combat the Black Plague work for an outbreak of disease today? How effective would it be to stop ships and their crews from coming ashore in order to stop a disease from spreading?

P	M	I
Stops new carriers coming ashore and spreading it.	The sick people on the ship might die without treatment.	Should a city or country look after its own citizens first?
The city saves money by not having to treat the sick people from the ship.	People might try to get off the ship anyway and no one would know where they went onshore if it is done in secret.	Is it everyone’s responsibility to do their best for other people, no matter where they come from?

1.8.4 Let me do it

1.8 SkillBuilder activity EVALUATING

Practise forming strong evidence-based conclusions with the following activities.

For more help with this activity, you might:

- Follow the short version of the steps in the **Review** at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia. What changes might improve the process?

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met. Suggest ways in which the situation might be resolved.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may have to this place. What actions, rules or changes could be implemented to ensure that all Australians understand and respect those connections?

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how they changed over the medieval time period. What conclusions can you draw about the long-term impact of the changes?

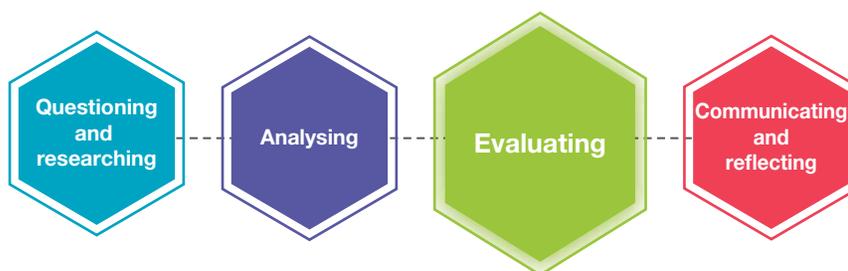
LESSON 1.9 SkillBuilder: Evaluating the impact of a decision

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **evaluate** evidence and **identify** perspectives to make judgements about impact.

1.9.1 When to use this SkillBuilder

This SkillBuilder develops your evaluating HASS skills. Use this SkillBuilder **after** you have finished analysing your data. Use this SkillBuilder **to start writing** your response.



1.9.2 Tell me

To make good decisions that benefit society, either as a whole or a small section of it, you have to understand and consider others' perspectives.

Examining evidence includes evaluating and predicting what situations are like or will be like for other people — now and in the future. It is also important to be able to empathise with people from the past so we can understand why they made the decisions that they made and learn lessons from them.



In Year 8 HASS, the focus of this skill is comparing different perspectives and views.

1.9.3 Show me

Step 1: Identify relevant perspectives

It can be a challenge to really understand how other people felt or how they viewed certain situations, especially when they come from a time period, place or culture very different to your own. However, this is a crucial part of being able to evaluate any proposal.

To do this, you will need to:

- identify who is likely to be affected by a proposed action (list the broad groups or types of people who will be affected)
- understand each group's perspective or views in general — their background, beliefs, needs and wants, and what they value — and how they are likely to be affected by the proposed action.

The focus questions in **TABLE 1** can help to provide a framework for developing a better understanding of a group and their perspective. Not every question will be relevant in every situation.

TABLE 1 Understanding the factors affecting perspective

Focus question	Some specific factors to consider
Who were/are these people?	Think about age, gender, wealth, education, language, religion, ethnic background.
Where did/do they live and when?	Consider the place in terms of its geographical location (including urban, rural, suburban, remote) and its environment (desert, coastal, grasslands, forest).
How did/do they live?	Think about their homes, jobs, families, communication and travel; consider the size and interaction between the communities or groups in their society.
What was/is important to them in daily life, and in the long term?	Consider their needs and how they were met (food, water, shelter, health, hygiene, security).
What did/do they believe in?	Identify their religious or cultural beliefs (belief in a god/s and a moral code, attitudes to education, gender, power, money, looking after people who are in need, working for the good of the whole community rather than individuals).
What did/do they fear and what did/do they hope for?	Think about what they valued or needed most: safety from enemies, a good supply of fresh water, privacy, free choice, to please god? People often react with fear when they believe a change will affect their basic needs or what they value the most in life. What most people hope for is obtaining or holding on to the things they need and value.
Did/do they all think and feel the same or did/do they have differing perspectives?	Consider if there are smaller groups or individuals within the community who might have different views to the majority based on gender, age, experience, education, political beliefs, wealth, their job or other factors.

Imagine your school decided to start classes at 11 am and finish at 7 pm every day, based on research that shows that teenagers need to sleep later in the morning than adults.

Apart from affecting students, school staff and parents/guardians would also be affected, and probably have a strong viewpoint about the proposed change.

TABLE 2 Parents and guardians: factors affecting their perspective

Focus question	Group affected: parents/guardians
Who are these people?	Parents and guardians of students at your school: adults (early 30s+) from different backgrounds/cultures, etc.
Where do they live and when?	Present day, suburban outer Perth area
How do they live?	Connected to world online, generally live and work in local area, many homes, all adults, work full time
What is important to them in daily life, and in the long term?	Food and shelter for their family and people they care about, being healthy and having somewhere to live, raising their children to be healthy and happy, time to do the things they enjoy
What do they believe in?	Varies, but generally people believe in looking after their family; some have strong religious beliefs
What do they fear and what do they hope for?	Fear losing their job, home or other needs; their loved ones becoming sick or in trouble; hope for health, happiness, money to buy what they want and need
Do they all think and feel the same, or do they have differing perspectives?	No, many different views, e.g. some are more religious (lots of Muslim and Christian homes); some don't care as much about finishing school
Based on what you know about these people, what is likely to be their view on this proposed change? Why	<p>Likely to be against it:</p> <ul style="list-style-type: none"> • Worried about students travelling home later at night (safety) or being at home alone each morning • Means spending less time with their family • Too late for some students to concentrate • For religious families, this might interfere with religious commitments • Evening meal would have to be quite late • The times wouldn't match with most people's working hours during the day so it would make their family routine difficult/different

WHAT IF I DON'T KNOW ANYTHING ABOUT THE PEOPLE?

You might not know much about them, but that doesn't mean you can't find out. Do a quick search online. Is anyone who fits the profile of the group posting about their life and interests online? Is anyone writing about this issue?

Step 2: Compare the different viewpoints

Compare each group's perspective with the consequences of the action: why would they think that way?

- Would it destroy or protect something they value?
- Is it disrespectful of or in line with their beliefs?
- Would it meet or deny them things they need and want?

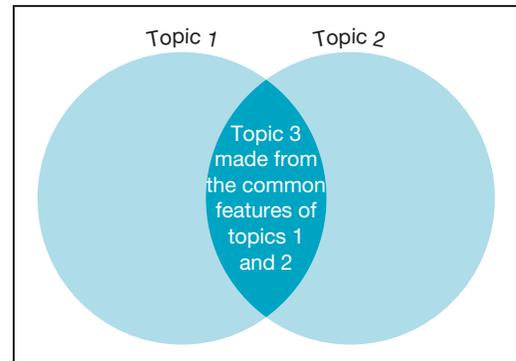
Consider whether the groups are likely to take the same view, and whether they are likely to think this for the same or different reasons. If you're not quite sure by looking at your notes or tables, you could consider working through this comparison with a Venn diagram.

A Venn diagram is used to compare the similarities and differences between things. The simplest are created from two intersecting circles, but they can be used to compare more than two things — just add more circles.

Once you have isolated the common reasons for or against a proposed change by affected groups, consider whether their response is justified.

- Will the proposed action really have the impact they expect?
- Are the negative impacts outweighed by the positive ones?
- Are their views based on reliable information?
- Will their viewpoint lead to the best outcome overall or are they only considering the benefits and costs for themselves?

FIGURE 1 A Venn diagram is used to show the differences between topics, ideas or views, and their common features.



1.9.4 Let me do it

1.9 SkillBuilder activity 1 EVALUATING

1. What view or views would staff at your school have about this proposed change about school times? Complete the table to consider their perspective.

Focus question	Group affected: staff
Who are these people?	
Where do they live and when?	
How do they live?	
What is important to them in daily life, and in the long term?	
What do they believe in?	
What do they fear and what do they hope for?	
Do they all think and feel the same, or do they have differing perspectives?	
Based on what you know about these people, what is likely to be their view on this proposed change? Why?	

2. Draw a Venn diagram to compare the similarities and differences between the parents/guardians' reasons for being against the proposed change, and those of teachers.

1.9 SkillBuilder activity 2 EVALUATING

Practise your skills at evaluating impacts of proposed action with the following activities.

- Follow the short version of the steps in the **Review** at the end of this topic.
- Follow the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Propose an idea for a new Australian law. Identify how this new law would affect people in your community. Identify three different types of people who would be affected and explain how they would most likely respond to your proposal.

Economics and Business

Find reliable and accurate sources that detail a case study where consumer rights were not met. What action would you take to provide the consumer with justice? What would the impacts of your decision be for each of the parties involved and how would each party respond to your decision?

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people have to this place. What action would you take to protect the cultural or spiritual heritage of this place? Explain how your action would affect at least three different groups who might use or live near this place, and how they might respond.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how they changed over the medieval time period. If you were a medieval lawmaker, what law would you like to introduce? Explain how your action would affect three different groups in society, and how each group might respond.

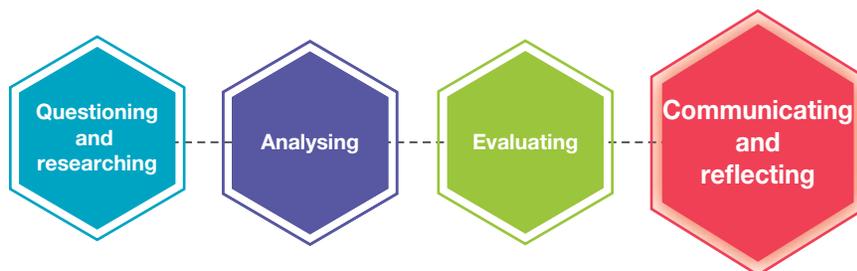
LESSON 1.10 SkillBuilder: Representing information in oral presentations

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **identify** the best way to communicate your information.

1.10.1 When to use this SkillBuilder

This SkillBuilder develops your communicating and reflecting HASS skills. Use this SkillBuilder **to help with creating** an oral presentation.



1.10.2 Tell me

Representing information appropriately means making sure you are saying what you want to say in the right way. There is no point trying to describe the symptoms of the Black Death in a graph. However, if you represent the data about the disease's spread in a graph or create a diagram that shows the development of symptoms, people will understand what you are saying, and they will learn from it.

You need to look at what you are being asked to do, your hypothesis and your information. What is the best way to make sure you are addressing all three of these things in an oral presentation?

A successful oral presentation starts before a single word has been spoken:

- You must research and plan your speech properly. Being organised and prepared will give you confidence in yourself and in your subject material.
- *Proper use of visual aids.* Are you going to use PowerPoint, Canva or any other visual aids? If so, you need to consider how to use these tools properly. Avoid overloading your audience with a cluttered combination of visual and audio information.
- *Delivery.* The final key to a successful presentation is the delivery. Sustained eye contact and a confident, well-projected voice will help you deliver your intended message.



In Year 8 HASS, the focus of this skill is choosing an effective way to present specific information in an oral presentation.

1.10.3 Show me

Two of the most common assessment tasks or assignments that students are asked to complete are written responses (e.g., an explanation or description) and oral presentations.

When people present information to an audience, they often use accompanying visuals — slides with charts, graphs, summary points or images; however, not everyone uses them effectively.

Step 1: Prepare what you want to say and show

Create a plan that outlines the main ideas and the order in which you want to cover them in your presentation. Include specific evidence from your research for each main point. This is just a skeleton of your speech, so write in point form and just refer to where you can find the evidence rather than copying all the details out.

TABLE 1 Preparing for your presentation

Identify the purpose of the presentation	To explain how trade helped to spread the Black Death
Key message	That traders on ships brought the Black Death ashore when they stopped in ports to deliver goods
Main points	<ol style="list-style-type: none">1. The BD began earlier in cities on major trade routes; evidence: map with dates in textbook2. The BD spread along similar routes as those used by traders shipping goods; evidence: article from thought.co3. BD spread inland with people from port cities or near overland trade routes; evidence: National History Museum website

Using visuals

Visual information can add to your presentation. However, if used incorrectly, it can decrease the effectiveness and clarity of your message.

Some of the most common errors people make when creating presentation slides include:

- Too many words: keep the text on your slides to a key sentence or heading at most
- Tiny font: trying to put too many words on a slide often results in a font too small for your audience to read
- Too many different transitions and animations: a good presentation is consistent and suited to the topic. Too many spinning or fast transitions can be very distracting for an audience that is trying to listen carefully.
- Too many slides: the focus of your presentation should be you.

Make sure that any visual aids serve a clear purpose.

Step 2: Plan and practise your delivery

The effectiveness of your speech often relates to the connection you make to your audience. Sustained eye contact and a confident delivery of your speech are two ways to boost this connection — one relies on the other. If you are not confident, you will be less likely to make eye contact in a relaxed and engaging way.

WHAT IS SUSTAINED EYE CONTACT?

Sustained eye contact requires more than looking up from your notes every now and then, and it certainly does not include staring at people in your audience until they feel uncomfortable, either. It means looking around your audience as you speak, making and holding eye contact with members of your audience for a few seconds at a time.



Building confidence

Strategies for improving your presentation skills will depend on how confident you feel speaking in front of other people. For many people, it isn't enjoyable or a natural skill. If this is you, try out the following Level 1 strategies to reduce your nerves. If you are more confident, and love an audience, try some 'pro tips' from Level 3.

FIGURE 1 Find your level to begin improving your oral communication skills.

1



- **Notes:** Write your speech on cards. Use card, not paper, because it doesn't bend. (This is also a good opportunity to reuse cardboard that is bound for recycling.)
- **Organisation:** Write in black or blue, but order your cards with big red numbers in case they get mixed up or you drop them. You can also use an old keyring and holes in the top corner of the cards to keep them in order.
- **Stage directions:** Write instructions on your cards in a different colour to the words you will say. Include instructions to pause and breathe, change a slide and look up.
- **Slides:** Put information on your slides that is colourful and interesting; this will draw people's attention so they will look at your slide rather than watching you. Do not summarise your whole speech in slides.
- **Rehearse:** Practise with your cards and presentation at home, in the mirror or with your family/friends if you can. Don't ask them for feedback, just ask them to listen so you can get used to having an audience.

2



- **Notes:** Write the most important parts of your speech on cards, using headings and main points only. Include specific details that you must explain correctly (e.g. data, quotes or words you find hard to remember/pronounce).
- **Organisation:** Write in black or blue, but order your cards with big red numbers in case they get mixed up or you drop them.
- **Stage directions:** Write instructions on your cards: pause, change a slide, move from podium, point out image on slide, relax and explain this part without your cards.
- **Slides:** Put information on your slides that adds to what you are saying (a heading signalling a change of topic), or illustrates it (a picture or graph). Do not summarise all of your key points on your slides.
- **Rehearse:** Practise with your cards and presentation at home, in the mirror first and then with your family/friends. Ask them for feedback about your speech and your performance.

3



- **Notes:** Write headings and important quotes and data on cards or try a single card with a list of key points in order.
- **Organisation:** Write in black or blue, but order your cards with big red numbers.
- **Stage directions:** Use natural hand gestures. Rehearsing gestures looks forced, and can make you look more nervous than you really are. If you are really confident, you might even try a little audience participation by asking for a show of hands or a volunteer.
- **Slides:** Put information on your slides that adds to what you are saying (a heading signalling a change of topic), or illustrates it (a picture or graph). Talk through aspects of the visuals, or point them out, without needing notes.
- **Rehearse:** Practise with a focus on your timing and fluency. Play with the delivery until it feels just right; for example, experiment with which words to emphasise and where to pause.

1.10.4 Let me do it

1.10 SkillBuilder activity COMMUNICATING AND REFLECTING

Practise your skills at presenting your ideas well with the following activities.

- Follow the short version of the steps in the **Review** at the end of this topic.
- Follow the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Develop a presentation that explains the process of making laws in Australia.

Economics and Business

Find reliable and accurate sources that detail a case study where consumer rights were not met. Create a presentation to discuss what happened and how the situation was resolved.

Geography

Choose a landform in Australia with cultural or spiritual significance, such as Uluru. Develop a presentation that explains its value and how we can protect it.

History

Develop a presentation that illustrates the key changes in crime and punishment during the medieval time period.

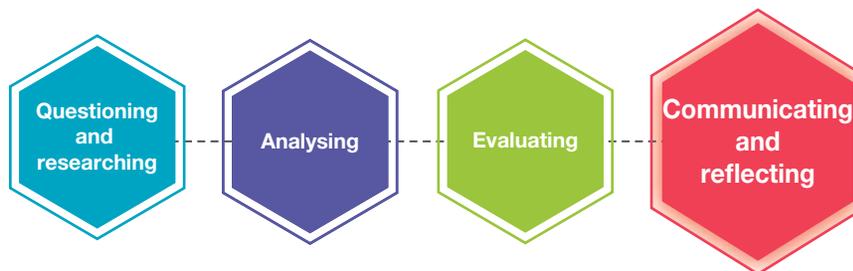
LESSON 1.11 SkillBuilder: Developing effective texts through argument paragraphs

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **demonstrate** how to create a strong paragraph with appropriate terms and structure.

1.11.1 When to use this SkillBuilder

This SkillBuilder develops your communicating and reflecting HASS skills. Use this SkillBuilder **to help with creating** your response.



1.11.2 Tell me

One of the most common ways that you are assessed in your school career is by writing extended (longer) responses to information, especially descriptions and explanations.

An effective extended response for HASS subjects has several characteristics. It clearly explains the essence of an issue or topic and contains evidence and examples. The two main types of extended responses to focus on this year are explanations and discussions.

The purpose of an **explanation** is to make relationships clear (cause and effects, or patterns) and to show the 'how and why' of an issue with evidence and examples.

Discussions outline the main issues and present the arguments for and against an idea.



In Year 8 HASS, the focus of this skill is writing effective paragraphs to express a clear point of view.

1.11.3 Show me

Step 1: Structure your paragraphs

An argument paragraph presents a point of view. Beginning with a topic sentence (also called a thesis statement), the paragraph then explains the point of view and supports it with evidence. Finally, a linking sentence will draw the reader's attention back to the key questions being discussed. In this way, an argument paragraph follows the TEEL structure:

- **Topic sentence** — describes what the argument paragraph addresses
- **Explanation** — explains your main argument in detail
- **Evidence** — supports your argument with at least one piece of evidence
- **Linking sentence** — links the paragraph back to the main question.

Imagine you have been asked to write a paragraph arguing that climbing Uluru should have been banned when the title deeds to the land were handed back to the Anangu people in 1985.

The following paragraph is an example of the kind of paragraph that you might write. It was written using the TEEL structure. The different parts of the paragraph have been colour-coded to make it easier to see TEEL in action (**Topic**, **Explanation**, **Evidence**, **Link**).

Tourists should have been prevented from climbing Uluru after the land title was returned to the Anangu people on 26 October 1985. Uluru is a sacred place for the Anangu people. Tourists have been climbing the rock, against traditional laws, since the late 1930s. In the 1990s, the Anangu people began asking visitors not to climb the rock out of respect for their culture, but many people did not follow their request. The return of the title to the land by the Australian government in 1985 would have been the perfect time to allow the values and beliefs of the Anangu people to completely determine the way Uluru was used by others. The climb has now closed, but it is estimated that the side of the rock that people used to climb will take up to ten years to lose its grey colour. The manager of the Uluru-Kata Tjuta Park believes that the track worn into the side of the rock may take thousands of years to recover. Had the climb been banned in 1985, after only 22 years of climbers following the path up the rock, rather than 57, the damage would have been far less significant. People should never have been climbing the rock but considering it was clear at the hand-back in 1985 that climbing was disrespectful, this would have been the perfect time to begin the ban.

FIGURE 1 Tourists are no longer able to climb Uluru.



Step 2: Use terms that are accurate, specific and appropriate

Once you have a draft of a paragraph, look over it. Do you have the right words in the right places? More importantly, do you know what they mean? If you are unsure, look them up or change them. If you can't understand them, will your audience be able to?

When you are outlining an argument, it is also important to use the right cultural and legal terms. The more precise you are, the more authoritative your paragraph will sound.

For example, consider the difference between these sentences:

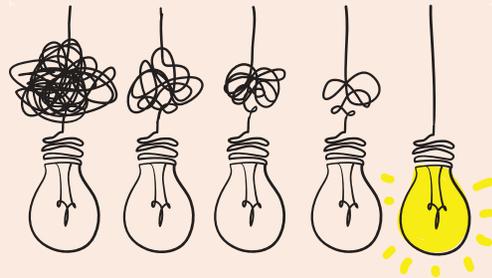
- **Tourists** should have been prevented from climbing Uluru after the **land title was returned** to the **Anangu** people on **26 October 1985**.
- **People** should have been prevented from climbing Uluru after the **Indigenous** people were **given the land back** in **1985**.

These two sentences say the same thing, but the pairs of words in bold show the power of finding the right words.

- **Tourists/people:** be specific and accurate. What kind of people? They are not local people; they are visitors to the area.
- **land title was returned/given the land back:** use the accurate and correct terms that reflect the legal status of the land ownership.
- **Anangu/Indigenous:** use the appropriate term to describe the titleholders of the land.
- **26 October 1985/1985:** be specific. Facts and exact dates of important events add weight to your argument. They show that you have been precise in your research and the information you are providing.

IS YOUR MESSAGE CLEAR?

It's great to experiment with language but be careful with your word choices. People often fall into the trap of thinking that a longer answer or more complicated language makes them sound impressive and clever. Sometimes, a clear and simple message is the most effective.



1.11.4 Let me do it

1.11 SkillBuilder activity

COMMUNICATING AND REFLECTING

Practise your skills at creating effective paragraphs with the following activities.

- Follow the short version of the steps in the **Review** at the end of this topic.
- Follow the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Write at least two paragraphs discussing the process of lawmaking in Australia.

Economics and Business

Write at least two paragraphs discussing whether Australians have too many consumer rights.

Geography

Choose a landform in Australia with cultural or spiritual significance, such as Uluru. Write at least two paragraphs discussing whether the landform should be closed to the public to protect it from harm.

History

Write at least two paragraphs to discuss the key changes in crime and punishment during the medieval time period.

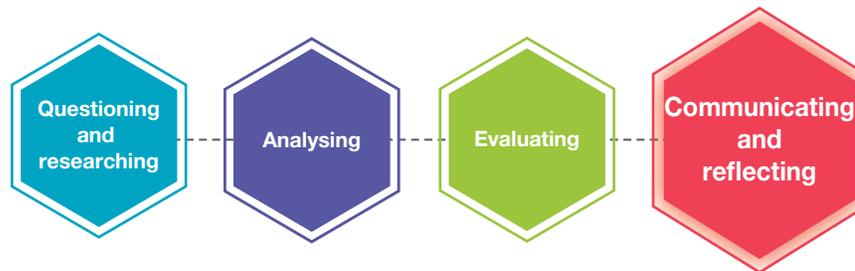
LESSON 1.12 SkillBuilder: Reflecting on your learning

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **explain** how you might use what you have learnt in the future.

1.12.1 When to use this SkillBuilder

This SkillBuilder develops your communicating and reflecting HASS skills. Use this SkillBuilder **after** you have completed your inquiry task.



1.12.2 Tell me

Reflecting on your learning means thinking about what you learnt and how well you are developing the skills of HASS.

Ask yourself questions such as:

1. What did I learn?
2. How can I apply this to my life?
3. How well did I research?
4. What can I improve for next time?

In a reflection it is important to be as specific as possible. This is how you learn.

Instead of: I wrote my questions well.

Try giving more detail: I wrote the 5W 1H questions well, but I think I can improve my evaluative questions for next time. I can do this by making them more specific to the hypothesis I am proving.



In Year 8 HASS, the focus of this skill is identifying how you can improve your skills and deepen your understanding.

1.12.3 Show me

It is important to reflect on each step in a task or process. Chances are you have been reflecting and changing as you have gone along, but take some time to think about which stage of a project you found the most interesting, rewarding, difficult or frustrating.

Step 1: Look back at your process

There are many great ways to reflect on what you have learnt and how you went about a process. One way is two stars and a wish: what are two things you thought you did well, or really enjoyed? What is one way you can improve the process for next time?

- What did I do well?
- What could I do better next time?
- What did I learn?

For example:

Two stars:

1. I found a range of relevant and reliable sources.
2. I was able to communicate what I learnt from the sources in an effective presentation.

One wish: I think I could have suggested more detailed and effective solutions. I found it difficult to suggest how other people might feel about my ideas.

Try to do this for each step in the process.

WHAT IF I CAN'T THINK OF ANYTHING?

Your process of reflection doesn't need to be a lengthy analysis of what you did and did not do. It might be a few words that will make you really proud of yourself and some ideas for what to do better. The next time you are asked to use these skills, you can look back on the improvements and immediately know what you need to work on to improve.

If you can't think of what to write, start with adding one phrase to each of these sentence starters.

- The questions I wrote at the start of my research were . . . (helpful? hard to write? too off the topic?)
- The information I found was . . . (useful? hard to understand? not really trustworthy?)
- Before this task, I didn't know . . . (a fact? a skill?)
- One question that I have after completing this task is . . .



Step 2: Consider how the task could apply in your life

When you have reflected on how you might improve your HASS skills further, think about how the concepts and skills you have learnt from a task might be useful in your life outside school.

These thoughts don't need to be about the topic; they can be things like:

- When I see things in my social media feed, I have a better understanding of whether the information is reliable or unreliable.
- I will be able to structure my paragraphs more effectively.
- I have a more organised approach to making notes.

1.12.4 Let me do it

1.12 SkillBuilder activity

COMMUNICATING AND REFLECTING

Think about how your HASS skills are developing.

For more help with this activity, you might:

- Follow the short version of the steps in the **Review** at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

Economics and Business

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

Geography

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

History

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

LESSON 1.13 Review

1.13.1 Key knowledge summary

Questioning and researching

1. Develop focus questions to help you research a topic.
 - Step 1: Identify what you already know or believe.
 - Step 2: Identify what you need to know to further your understanding.
 - Step 3: List what you know and what you need to find out.
 - Step 4: Write a hypothesis.
 - Step 5: Review and format your focus questions.
2. Record information from different sources.
 - Step 1: Complete a quick assessment of each source that looks useful.
 - Step 2: Collect reliable and accurate information from a variety of sources.
 - Step 3: Make notes in your own words.
 - Step 4: Organise your notes.
 - Step 5: Follow ethical protocols or rules.

Analysing

3. Find information that is right for your specific research task.
 - Step 1: Examine the task, your notes and sources.
 - Step 2: Separate the kind of information you need.
4. Look for links (similarities or differences) and patterns.
 - Step 1: Identify any relationships or trends.
 - Step 2: Identify different perspectives.
 - Step 3: Explain how viewpoints affect our understanding.
5. Find the right way to show your information.
 - Step 1: Present the information in your own words.
 - Step 2: Create diagrams or visuals to show information, if needed.

Evaluating

6. Form a point of view.
 - Step 1: Consider your data and information.
 - Step 2: Suggest possible alternatives for action.
 - Step 3: Consider whether the effects are worth the consequences.
7. Weigh up the costs and benefits of change.
 - Step 1: Identify relevant perspectives.
 - Step 2: Compare the different viewpoints.

Communicating and reflecting

8. Show information clearly.
 - Step 1: Prepare what you want to say and show.
 - Step 2: Plan and practise your delivery.
9. Use effective paragraph structure and vocabulary.
 - Step 1: Structure your paragraphs.
 - Step 2: Use terms that are accurate, specific and appropriate.
10. Explain how you might use what you have learnt in the future.
 - Step 1: Look back at your process.
 - Step 2: Consider how the task could apply in your life.

1.13.2 Key terms

accurate correct and factual

cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences

cite give the details of

describe to give details about features and characteristics of a person, place, thing or idea

discussions responses to a topic or question that present arguments for and against an idea, supported with evidence and examples

evaluative based on assessing value

evidence information that is used to show why a hypothesis, opinion or explanation is correct

explanation a response to a topic or question that outlines how and why something happens, and the relationships involved, and provides supporting evidence and examples

facts information that is objectively true (not influenced by opinion or feelings)

hypothesis an idea or explanation that is used as a starting point for deeper investigation or research

identify to recognise and name

inferential coming to a reasonable conclusion after piecing together evidence

infographic a visual way of presenting data and information with images and very little text

literal to be exact, without exaggerating or misleading

opinion a point of view that may be subjective (based on personal feelings rather than fact) or objective

perspective a point of view, way of thinking, opinion or belief about an issue, event or thing

pictograph a graph that uses pictures to represent data

plagiarise to copy other people's work and present it as one's own

primary sources objects and documents that were created or written in the period of time that the historian is investigating

qualitative information that provides characteristics and description

quantitative information that provides measurable figures

questions issues or problems that are raised but not answered

relationships connections between events

reliable the information in the source is more accurate than other sources (you can rely on it more to be correct)

secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying

spatial distribution the way things (e.g. population or land use) are spread across places

trend a pattern of change over time

trend line the direction in which something is developing, moving or changing

useful related to your research

1.13.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview.

Why is it important to study HASS, and what skills can I build?

1. Now that you have completed this topic, what is your view on the questions? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry questions, outlining your views.

learn on



eWorkbook

Customisable worksheets for this topic
Reflection



Digital document Key terms glossary

1.13 Review exercise

Learning pathways

■ LEVEL 1

1, 4, 5, 10, 11

■ LEVEL 2

2, 6, 7, 8, 9, 12

■ LEVEL 3

3, 13, 14, 15

REMEMBER AND UNDERSTAND

1. What is the primary focus of HASS?
 - A. Mathematics and Science
 - B. Humanities and Social Sciences
 - C. Physical Education
 - D. Technology and Engineering
2. Which of the following is *not* a key concept in HASS?
 - A. Democracy
 - B. Space
 - C. Photosynthesis
 - D. Sustainability
3. What skill involves carefully examining and comparing information?
 - A. Questioning
 - B. Analysing
 - C. Communicating
 - D. Reflecting
4. Which of the following is a key skill in HASS?
 - A. Coding
 - B. Cooking
 - C. Evaluating
 - D. Painting
5. What does the acronym HASS stand for?
 - A. Health and Social Sciences
 - B. Humanities and Social Sciences
 - C. History and Social Studies
 - D. Human and Social Studies
6. Which concept involves understanding the relationships between events and their outcomes?
 - A. Space
 - B. Scale
 - C. Cause and effect
 - D. Empathy
7. What is the purpose of reflecting in HASS?
 - A. To memorise facts
 - B. To share findings with others
 - C. To look back at what you have done and learnt
 - D. To create new theories
8. Which of the following is a key concept in Geography within HASS?
 - A. Democracy
 - B. Space
 - C. Justice
 - D. Participation
9. What does the skill of questioning and researching involve?
 - A. Creating well-focused inquiry questions
 - B. Drawing conclusions
 - C. Developing effective texts
 - D. Reflecting on learning
10. Which of the following is *not* a subject within HASS?
 - A. Civics and Citizenship
 - B. Economics and Business
 - C. Geography
 - D. Physics

ANALYSE AND APPLY

11. What are the four main skills within HASS?
12. **Explain** the importance of the skill of analysing in HASS.
13. **Describe** how the concept of sustainability is relevant to Geography in HASS.
14. What is the role of reflecting in the learning process of HASS?

EVALUATE AND COMMUNICATE

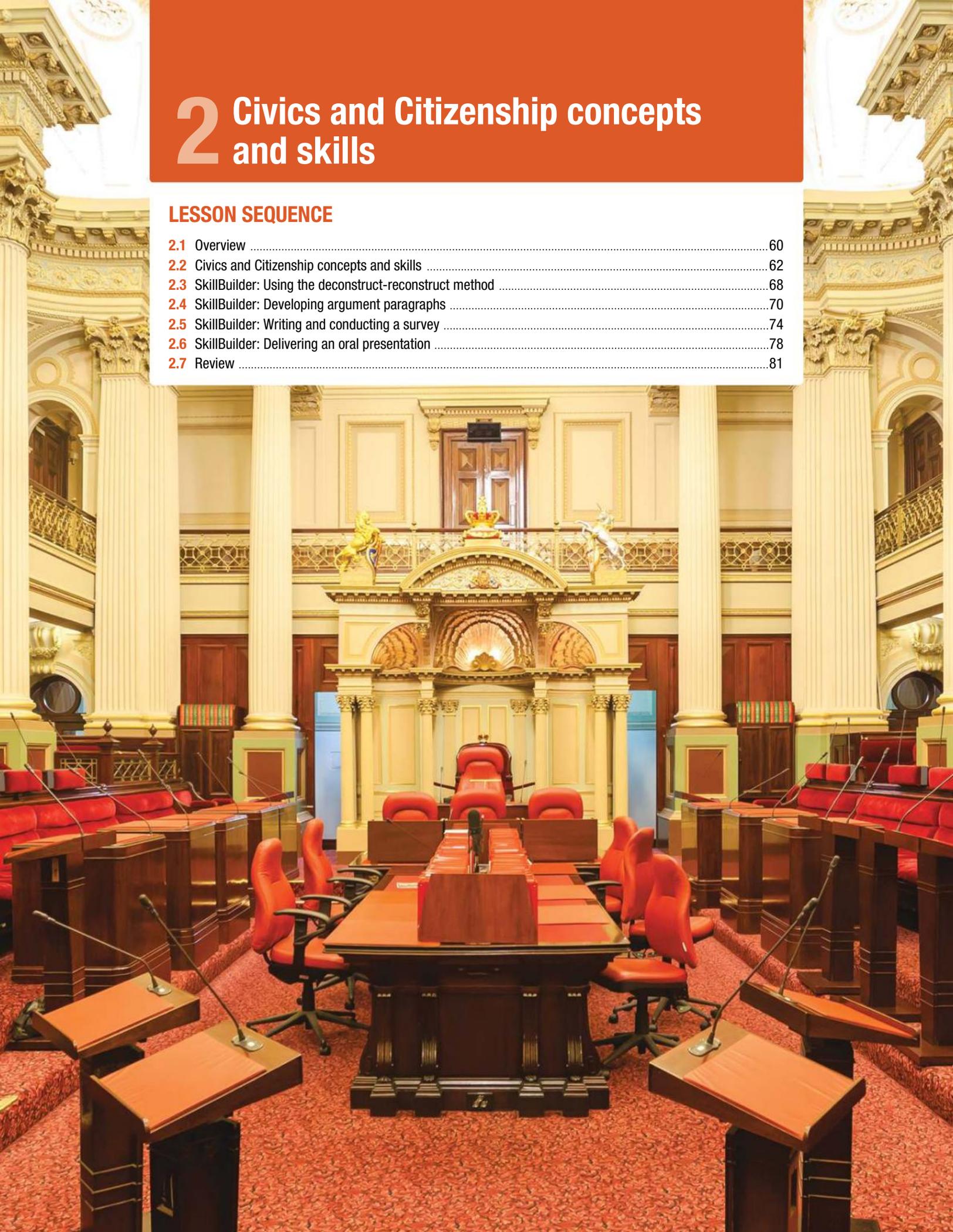
15. How does the concept of cause and effect help in understanding historical events?

Answers and sample responses for this topic are available online.

2 Civics and Citizenship concepts and skills

LESSON SEQUENCE

2.1 Overview	60
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LESSON 2.1 Overview

INQUIRY QUESTION

Why is it important to study Civics and Citizenship, and what skills do I need?

As a student of Civics and Citizenship, you are developing the knowledge and skills that will be needed by you and society now and into the future. In your study of Civics and Citizenship, you will cover topics on Australia's democratic systems of government and how laws are made.

Studying Civics and Citizenship may be necessary for your chosen career, or may help indirectly by giving you broader knowledge and skills, especially in the understanding of government and legal systems. You will also learn about your rights and responsibilities, such as the right to publicly express your views and the responsibilities and expectations that come with that right.

learn on

-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital document**
Key terms glossary
-  **Video eLesson**
Civics and Citizenship concepts and skills





SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING



LESSON 2.2 Civics and Citizenship concepts and skills

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** and **explain** the Civics and Citizenship concepts and skills
- **explain** why the study of Civics and Citizenship is important.

2.2.1 Introduction

Western Australia is generally a safe place in which to work and travel, in comparison to many other countries in the world, due to many factors. We have laws enforced by police that apply to the whole community. Public roads are built and maintained by local councils and state government. Many essential services are provided by the government, such as electricity, hospitals and the post. Western Australia also has comparatively low unemployment levels.

Most of these factors are dependent on having a stable and secure government, and parliamentary representatives, who are accountable to the people who elected them.

Government decisions and laws passed by parliament affect many areas of your life. The political ideologies or beliefs that influence government policies will continue to affect you, and the society in which you live, into the future. You have a responsibility to care about these various ideas and to engage with the society that your vote will help shape in the future.

2.2.2 Concepts in Civics and Citizenship

TABLE 1 The six core concepts that you will learn about in Civics and Citizenship

Concept	Description
Democracy	You will learn what democracy is and how it works in Australia.
Democratic values	You will learn what are the standards or instructions that shape our democracy including free and fair elections and equality of race, religion, gender and ethnicity.
The Westminster system	You will learn where Australia's system of government comes from and its structure.
Rights and responsibilities	You will learn that democracy involves both rights and responsibilities.
Justice	You will learn how the justice system operates and the rights and responsibilities of young people in regards to the law.
Participation	You will learn how you as an individual can be involved in the political and legal systems in Australia.

Democracy

Democracy is a political system in which citizens choose the way in which they are governed (how and by whom the country is run). Australia is a democratic country because we elect (vote for) people to run our local, state and federal (national) governments.

Democratic values

Democratic **values** are the standards or instructions that shape a democracy. The values that shape our Australian democracy include having free and fair elections; having consistent rules that governments

and courts have to follow; respecting individuals' freedom to have their own views, ideas and beliefs; and equality of race, religion, gender and ethnicity. You will explore these values in more depth as you study the different parts of our political system.

The Westminster system

Westminster is the area of London in which the British parliament is found. Australia's system of government is based on the British system, which is known as the Westminster system. In HASS you will learn about the basic structure of this system and begin to understand the benefits and problems with the way this system has developed over time.

Rights and responsibilities

The study of Civics and Citizenship is not only about what the government or legal system provides or protects for us as citizens, such as the right to vote or the right to practise our religion; with these rights also come responsibilities. You will study what the system needs us to do to keep it working well. This includes responsibilities such as voting and keeping our democratic values, upholding laws and respecting the rights and freedoms of others.

Justice

The idea of justice is that people are treated fairly and in a way that is morally right in the eyes of the law. This is one of the key values in the Australian legal system, but that does not mean it is always achieved. In Civics and Citizenship, you will learn how laws are made, and the different types of laws.

Participation

This year you will learn about the democratic freedoms you have in Australia and how you can participate to the law-making process through submissions to parliament, lobby groups and taking **direct action**.

FIGURE 1 Voting is a right and a responsibility in a democracy.

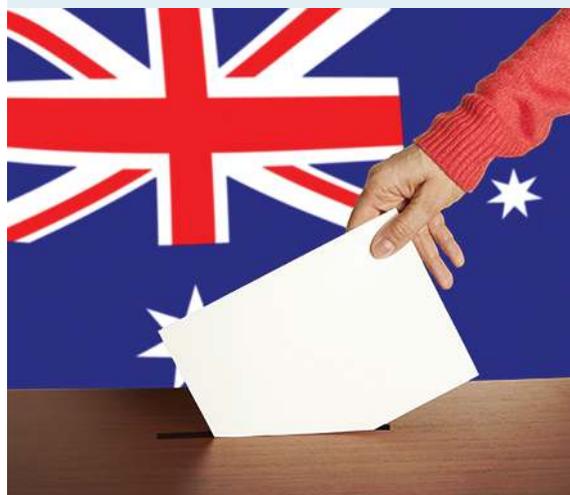


FIGURE 2 Taking direct action by protesting is one way citizens can use their democratic freedoms.



2.2.3 HASS skills

The skills you will develop across all of your HASS subjects fall into four main groups. While you will work on building these skills across all of your HASS subjects this year, you will use these skills in specific ways in Civics and Citizenship in Year 8.

2.2.4 Questioning and researching

Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources. In Civics and Citizenship this year, you will:

- construct more refined questions to frame research
- use a variety of methods to collect and record relevant information
- follow appropriate processes in gathering this information
- follow ethical protocols for citing your sources
- identify differences between primary sources (e.g., a cartoon, speech, artefact) and secondary sources (e.g., reference books, such as a dictionary or encyclopedia)
- explore your research questions from a range of different perspectives or points of view.

2.2.5 Analysing

Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole.

In Civics and Citizenship this year, you will be analysing a variety of sources including political advertising, speeches, media releases, court judgements, cartoons and news reports.

The skills you develop will help you to:

- determine what kinds of information you can rely on to be accurate
- identify if information is current
- spot bias in information that is presented as being factual
- refine your skills analysing different types of data, such as graphs, tables and charts of election results or opinion poll results.

As you research and learn about different things, you will evaluate issues by considering the strengths and weaknesses of differing opinions. Bias and different perspectives will be considered in selecting information used to form opinions. Alternative viewpoints will be acknowledged in your evaluations.

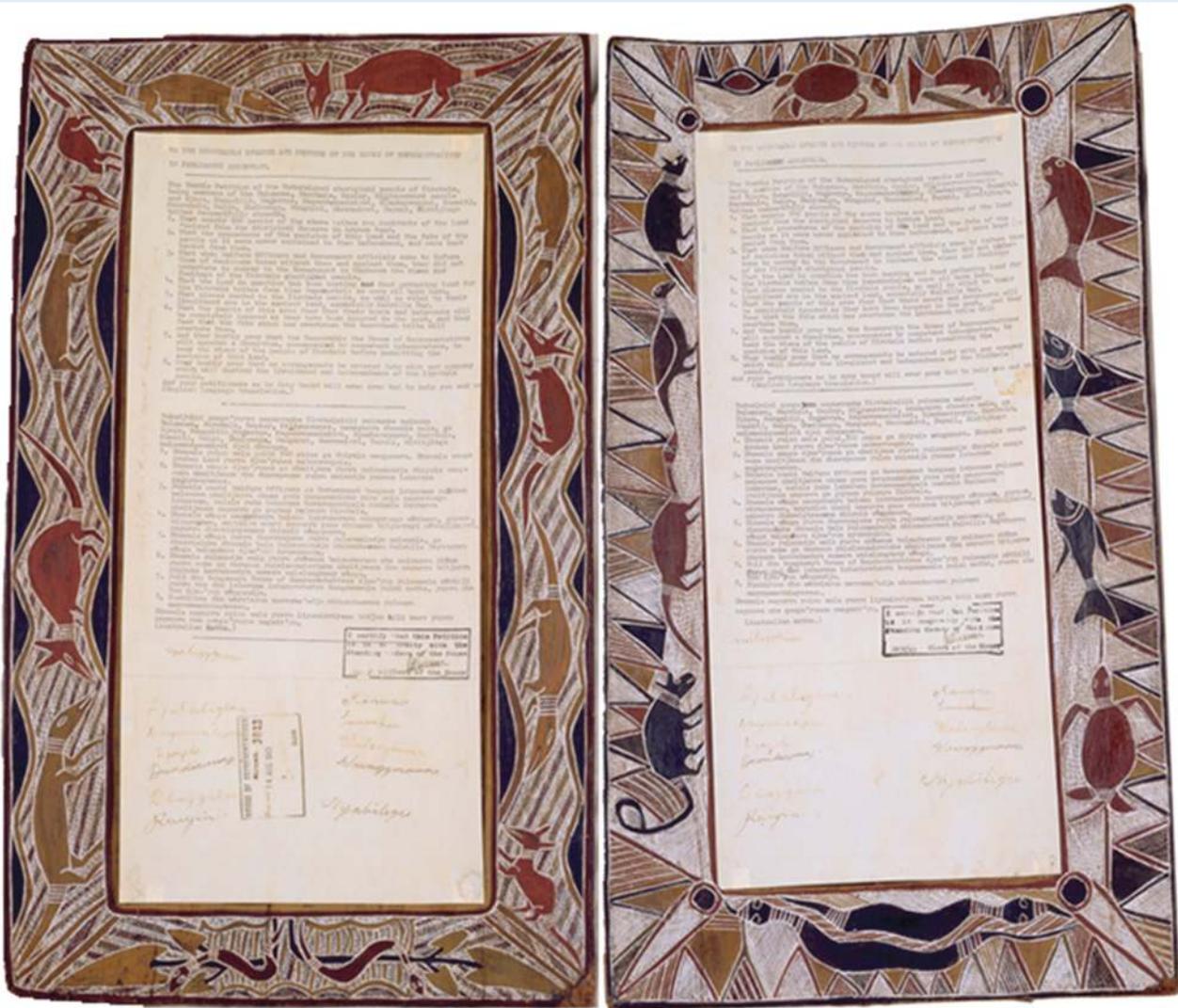
2.2.6 Evaluating

Evaluating means you draw evidence-based conclusions by evaluating information and/or data, taking into account uncertainties and multiple points of view.

This year you will:

- explore different perspectives or points of view
- determine how these are revealed in a source of information
- use your understanding of different perspectives to suggest responses to contemporary events or issues that best suit everyone involved.

FIGURE 3 These petitions were presented to parliament in 1963 by the Yolngu People of Yirrkala, in the Northern Territory, and raised issues relating to their dispossession from their traditional lands.



SkillBuilder discussion

Evaluating

Look at **FIGURE 3**. If you were researching the issue of dispossession, what extra information would examining this source give you that an online-only transcript of the documents would not?

2.2.7 Communicating and reflecting

By communicating and reflecting you will:

- reflect on findings from your research and analysis
- formulate and present descriptions/explanations
- argue a point of view using relevant terminology
- present information in a range of formats to suit the intended audience. This includes essays, oral presentations, debates, tables and cartoons.

FIGURE 4 An image of one of the Australia Day stamps, part of a series of 21 stamps which followed the voyage of the First Fleet. The series began in May 1987 and was withdrawn at the end of 1988.



SkillBuilder discussion

Communicating and reflecting

Look at **FIGURE 4**. Discuss and present the factors that might affect an Australian's point of view of this Australian stamp from 1988.

2.2 SkillBuilder activity ANALYSING

1. In pairs, mind-map ways people can influence government (e.g., petitions, contacting MPs, joining lobby groups, peaceful protest).
2. As a class, organise your ideas under three headings:
 - Electoral system
 - Lobby groups
 - Direct action
3. **Discuss** as a class which of these could you do now, even before you can vote?

Learning pathways

■ LEVEL 1

1, 2, 4, 6

■ LEVEL 2

3, 5, 7, 9

■ LEVEL 3

8, 10

REMEMBER AND UNDERSTAND

1. Why is democracy important?
 - A. It ensures citizens can freely choose their leaders.
 - B. It allows a monarch to control the state.
 - C. It restricts voting to wealthy individuals.
 - D. It places law-making power in the hands of the judiciary.
2. The Westminster system was developed in the United States. True or false?
3. Which of the following best represents democratic values?
 - A. The conduct of free and fair elections
 - B. Guarantee of equal rights for all citizens.
 - C. Upholding freedom of speech.
 - D. All of the above.
4. What responsibilities do citizens have in a democracy? Select all options that apply
 - A. Voting
 - B. Ignoring democratic values
 - C. Flouting laws
 - D. Respecting the rights and freedoms of others
5. Justice is always achieved for everyone. True or false?

ANALYSE AND APPLY

6. **Describe** why the concept of democracy is important.
7. Why are democratic values essential for a functioning democracy?
8. **Explain** the significance of the Westminster system in shaping Australian political structure.

EVALUATE AND COMMUNICATE

9. **Outline** why the active participation of citizens in the justice system is crucial.
10. **Explain** why Civics and Citizenship rights also come with responsibilities

Answers and sample responses for this topic are available online.

SkillBuilder: Using the deconstruct-reconstruct method

LEARNING INTENTION

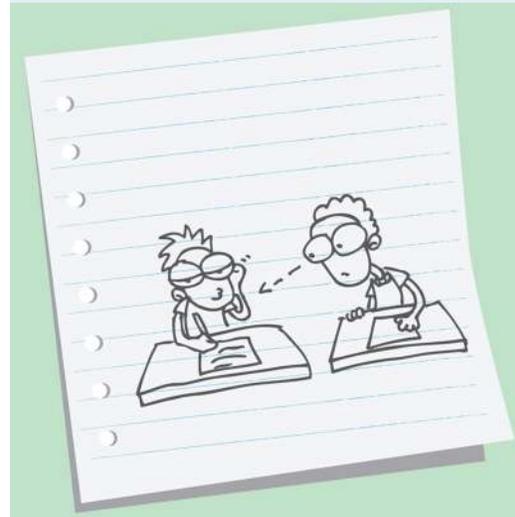
By the end of this SkillBuilder you should be able to write a paragraph in your own words using information from your research.

2.3.1 Tell me

The deconstruct–reconstruct method builds upon the skills of questioning, researching and note taking that you learnt in Year 7. In Year 8, you will learn how to avoid copying another person’s work by making careful notes from sources of information.

Regardless of whether it is from a classmate or an online article, we all sometimes plagiarise. Even if this is not intentional, it can occur because we are not deconstructing the information. The deconstruct–reconstruct method guides you through the process of using another person’s work appropriately.

FIGURE 1 Copying someone else’s work without acknowledging the author is called plagiarism.



2.3.2 Show me

The deconstruct–reconstruct method provides a way to transform existing information into original content. This approach enhances your understanding of the material and helps you organise your thoughts more clearly. By applying this technique, you can produce distinctive writings that maintain the essence of the articles and books you have explored during your research.

Step 1

Start by thoroughly reading the entire source from beginning to end. While it may be tempting, avoid highlighting or taking notes during this initial readthrough. Your aim is to simply absorb and understand the author’s work.

Step 2

After reading the information once, read it again. Like re-watching a movie to catch details, re-reading helps you grasp key points. Use a two-column table to organise your thoughts: list factual information in the ‘Quotes/facts’ column and your ideas or questions in the ‘Notes’ column. Use dot points or full sentences as needed. You don’t have to comment on every fact, but your notes will form the basis of your writing.

Quotes/facts	Notes
<ul style="list-style-type: none"> • Factual information • Direct quotes from authors or other people • Statistics 	<ul style="list-style-type: none"> • Ideas and questions you might think of while reading the source • Dot points and/or whole sentences

Let us use one of the paragraphs about Hinduism from a textbook to practise the deconstruct–reconstruct method.

Hinduism

Hinduism is the oldest major religion in the world and has been practised for more than 5000 years. Hinduism in Australia, however, only began in the mid-nineteenth century. Although there is evidence of Hindu shipping crews trading with the First Fleet, the first major period of Hindu immigration occurred well after the establishment of the Australian colonies. Hindu immigrants undertook several roles in early Australian society — as labourers, camel drivers, domestic staff and merchants. By 1911, there were over 1000 people in Australia who were affiliated with the Hindu faith. However, as with Islam, the growth of Hinduism in Australia was negatively affected by the White Australia policy. Today, Hinduism is a popular religion especially among Indian, Sri Lankan, Fijian and South African immigrants. According to the 2021 Australian census, Hindu practitioners accounted for 2.7 per cent of the population.

FIGURE 2 Sri Venkateswara Temple, Helensburgh, NSW



This is what your notes might look like:

Quotes/facts	Notes
<ul style="list-style-type: none"> Hinduism is more than 5000 years old. It began in Australia in the middle of the nineteenth century. 	<ul style="list-style-type: none"> Hinduism was the world's first religion. Where did Hinduism begin? How old are the other religions mentioned in this section?
<ul style="list-style-type: none"> By 1911, there were more than 1000 Hindus in Australia. 	<ul style="list-style-type: none"> Australia had only a small Hindu population at the start of the twentieth century. Which state had the biggest population? Did they feel isolated in this small community?
<ul style="list-style-type: none"> Hindu immigrants undertook several roles in early Australian society. 	<ul style="list-style-type: none"> Hindu immigrants had a number of different jobs in colonial Australia, many based on the environmental conditions of their home countries.
<ul style="list-style-type: none"> In 2021, 2.7 per cent of all Australians practised Hinduism. 	<ul style="list-style-type: none"> How many people is this? What factors have helped Hinduism grow so much in recent years? How does this growth rate compare to that of other religions?

Step 3

After you've made a table with your notes, put away the book and close the website. Rewrite what you've just read using only your table. The notes column should include your interpretation of the author's ideas, and the quotes/facts column gives the evidence to support your arguments.

The paragraph below has been written using the information summarised in the table above. Extra research has been completed to answer some of the questions in the notes column.

Some of the world's religions have been around for 5000 years. One of these longstanding religions is Hinduism. Although Hinduism is such an old religion, it began in Australia only during the mid-nineteenth century. Historically, Hindu communities have been small in size, with only about 1000 Australians identifying themselves as Hindu in 1911. Hindu immigrants had a number of different jobs in colonial Australia, many based on the environmental conditions of their home countries. At the most recent Australian census (2021), the total of Hindu practitioners was 684 000. This figure shows how much the religion has developed in Australia.

As you can see, the meaning of the paragraph created using the deconstruct–reconstruct method is the same as the original one. Both discuss the early history of Hinduism in Australia using similar statistics. However, since the deconstruct–reconstruct method was used, the written text is completely different. The author has combined information to create a unique piece of writing.

2.3.3 Let me do it

Complete the following activity to practise this skill.

2.3 SkillBuilder activity QUESTIONING AND RESEARCHING

Practise using the deconstruct–reconstruct method by choosing any paragraph from the *Jacaranda Humanities and Social Sciences for Western Australia* Civics and Citizenship lessons in Year 8. Apply the three steps of the process.

In this task, you will practise the deconstruct–reconstruct method of taking notes, and re-writing information in your own words.

1. Choose a case study or complex paragraph from your *Jacaranda Humanities and Social Sciences for Western Australia* resource.
2. In the right column of your page, write dot points summarising the information.
3. Once you have written out the notes in the right column, identify key people or themes in the left column. Make sure you write simple (dot point) notes — don't copy the sentences word-for-word.
4. In the bottom section of the page, write a paragraph summarising the information you have taken notes on.

LESSON 2.4 SkillBuilder: Developing argument paragraphs

LEARNING INTENTION

By the end of this SkillBuilder you will be able to present a clear point of view about a topic using multiple well-constructed paragraphs.

2.4.1 Tell me

Writing argument paragraphs is part of the communicating and reflecting skill in HASS. In Year 7, you practised using the TEEL structure in your argument paragraphs. In Year 8, you will build your skills in presenting your argument in a straightforward way, and using your arguments together in a longer piece of writing, such as an essay.

Many times in your academic career at school and beyond, you will be asked to write responses to questions that need several paragraphs. An effective essay or extended response has several characteristics.

- It clearly explains the background of an issue.
- It contains strong evidence and multiple examples.
- It discusses the positive and negative aspects of the issue.

Assessing the reliability of sources

Wikipedia can be a good starting point for research, but because anyone can edit it, always check the sources listed at the bottom of the page. If no sources are provided, the article may not have the factual information you need. AI tools might also help with quick info, but always double-check with at least two trusted sources to ensure accuracy. Keep your questions in mind and note where your information comes from to stay on track.

2.4.2 Show me

Imagine your teacher asks you to investigate our national flag as a symbol of our nation.

You have been asked to consider the following question: ‘The Aboriginal flag [this is the flag’s official name] should be the only national flag of Australia.’

FIGURE 1 The Aboriginal flag

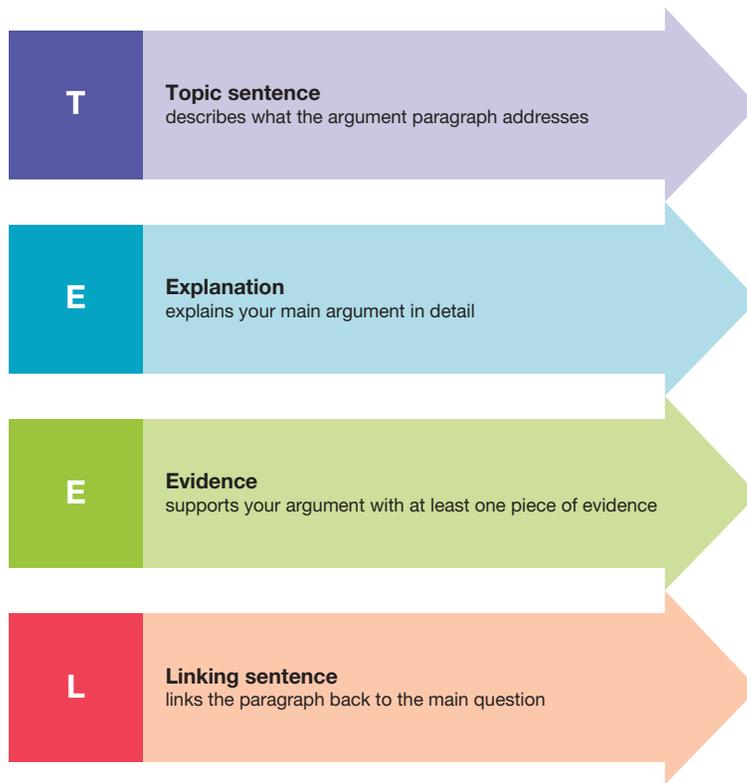


Step 1

In Year 7 Concepts in Civics and Citizenship SkillBuilder lesson 2.4, you learnt that an argument paragraph has the following structure.

The first step in writing your paragraph is to collect your information: your key arguments, the reasons why you believe each argument is true or important, and the evidence that supports each argument. One way to make sure you have all the information you need is to set it out in a table to help you plan.

FIGURE 1 Using the TEEL structure will help you organise your argument paragraphs.



For this topic, ‘The Aboriginal flag should be the only national flag of Australia,’ you might include these key arguments:

T	What is the argument I am making in this paragraph?	National flags are powerful symbols.
E	Why do I believe this argument is true or important?	Flags are used as a representation of a country and its people internationally, so they should be a symbol of the people and the country.
E	What evidence can I use to back up my argument?	The symbolism of the Aboriginal flag and why it represents all of Australia should be considered. This includes the colours of the flag and what they mean. This includes the colours of the flag and what they mean.
L	How does this link to the main topic?	The symbol is powerful; we should have a flag that really reflects Australia but has links to the past.
T	What is the argument I am making in this paragraph?	We are no longer ruled by Britain.
E	Why do I believe this argument is true or important?	The current flag was designed a long time ago. It was the winner of a competition and chosen by the British monarch. At that time, British influence was much greater than it is today.
E	What evidence can I use to back up my argument?	A new flag should be chosen by Australians, and symbolise the whole nation. The Aboriginal flag may not necessarily achieve this.
L	How does this link to the main topic?	Australia’s flag should represent modern Australia, but be reflective of the whole community.

Step 2

Draft your paragraphs using the TEEL planning structure. Make sure each part of the paragraph works together smoothly. Your paragraph should not sound like a list of TEEL sections; it should flow naturally.

One way to achieve this is to think about the transitions between your sentences. Transition phrases (phrases that show you are moving from one idea to the next) and conjunctions (connecting words that show the relationship between parts of a sentence) will help your paragraph flow smoothly from one part to the next.

Here are some simple transition phrases to use:

- This is supported by ...
- This is demonstrated by ...
- For this reason ...
- The most significant reason this should be the case is ...
- The evidence supporting this includes ...

With more practice, your transitions will become more subtle and fluent.

Step 3

Because you need to write two paragraphs, make sure there is a smooth transition from the first to the second. This makes your writing easier to read and your argument clearer. To do this, look at the question you have been asked for clues.

For example, if you are asked to write two paragraphs about why the Aboriginal flag should be the national flag of Australia, start each paragraph with a phrase introducing a new idea about that topic. Here are some examples:

- One reason why we should use the Aboriginal flag as our national flag is...
- The most important reason we should change our flag is...
- Changing the flag would also be an important way to show...

Don't repeat the same phrase or structure to start each paragraph; variation makes your writing more interesting.

Your final response might be:

One significant reason why we should use the Aboriginal flag as our national flag is that flags are the simplest and most powerful representation of a country and its people. They commonly contain symbols of culture, values and history. Because Aboriginal and Torres Strait Islander Peoples are the true owners of this land, it should be their culture, their values and their history that are represented in Australia's national flag. The background of the Aboriginal flag is divided horizontally into a black half and a red half. The black section represents the Aboriginal Peoples of Australia, and the red section represents the connection Aboriginal Peoples have to the land. The middle of the flag is a yellow disc that represents the provider of life: the sun. The Aboriginal flag reflects much about the Aboriginal people, and thus Australia itself. For this reason, the Aboriginal flag should be the only national flag used in Australia.

To show respect for the traditional owners of this land, we should not be using a national flag that includes symbols of Britain. The current flag was designed a long time ago as part of a competition and it was chosen by the British monarch, at a time when the influence of Britain was much greater. It does not truly represent Australia today. The British symbols also represent the taking of land, culture and language from Indigenous Peoples of Australia, and this should not represent Australia today. The Union Jack on the flag is a reminder of these awful events in our past. Australia's flag should represent modern Australia, not the past. However, this may not be achieved by the Aboriginal flag, as some may feel it is not reflective of the whole nation. Changing it will show greater respect for Aboriginal and Torres Strait Islander cultures, but it needs to represent the entire nation and consider our past and future. Perhaps a new flag could incorporate aspects of the Aboriginal and Torres Strait Islanders flags.

2.4.3 Let me do it

Complete the following activity to practise this skill.

2.4 SkillBuilder Activity

COMMUNICATING AND REFLECTING

Below are some essay topics that you can use to form the basis of your argument. To do this, complete a step-by-step worksheet from the Resources panel.

Use the information and tips in this SkillBuilder to practise writing your own argument paragraphs. Be sure to use the TEEL structure — it will help you logically organise your thoughts and arguments.

You will need to do some research before writing your practice paragraphs.

1. Voting should not be compulsory.
2. Lobby groups should be banned.
3. Only parliament should be able to make laws.
4. Young people should be treated as adults by the law.

LESSON 2.5 SkillBuilder: Writing and conducting a survey

LEARNING INTENTION

By the end of this SkillBuilder you will be able to **construct** a simple survey to collect information about a specific issue or research question.

2.5.1 Tell me

Collecting information through a survey is part of the questioning and researching skill in HASS. By asking the right questions, you can gauge public opinion on specific topics, which is crucial in Civics and Citizenship. Decision-makers often seek public input. In Year 8, you'll collect your own data and use existing information to enhance your research skills.

A survey collects data by asking a group of people a set of questions. For instance, political parties might use surveys to gauge citizen satisfaction with their policies. Surveys efficiently gather information on various topics, revealing attitudes, values, opinions and beliefs about political or legal issues.

A good survey:

- has a clear written introduction
- has simple questions early on
- places more sensitive personal questions towards the end
- leaves enough room for all the questions to be answered
- is of reasonable length
- is well presented
- is clearly analysed once responses are collected.

FIGURE 1 outlines more tips on creating a good survey.

FIGURE 1 Survey tips



2.5.2 Show me

Step 1

Decide what you want to learn from your survey. You need to clearly decide the goals of your survey beforehand; otherwise, your survey results will be unclear.

Step 2

Decide whom you want to survey. Will your target group include both young people and adults, or just young people? How many people will you survey? Generally, the more people you survey, the more reliable your results will be.

Step 3

Decide what method you will use to collect the data. Consider factors such as cost, speed and whether sensitive information is involved. Survey methods include:

- personal interviews
- telephone survey
- mail survey
- email survey
- internet/intranet webpage survey.

Online formats such as SurveyMonkey and Google Forms are a useful method of conducting surveys online.

FIGURE 2 Personal interviews may be conducted in a variety of places, such as at shopping centres or outside theatres. Personal interviews usually cost more to conduct than other survey methods.



Step 4

Design your survey. Start with a friendly introduction to encourage people to complete the survey. Work out your questions. There are two main types of survey questions.

- Open questions allow the respondent to record their thoughts about an issue. Look at the examples provided in the **FIGURE 3** sample survey for ideas.
- Closed questions ask the respondent to select an answer from a range of options — for example, yes or no.

Try to keep your survey short and your questions simple. Make sure the layout is uncomplicated and easy to follow.

FIGURE 3 Examples of different types of questions

Question type	Example															
RATING SCALE	<p>How would you rate the performance of our courts? Please circle one response.</p> <p>Excellent Good Fair Poor</p>															
AGREEMENT SCALE	<p>How much do you agree with the following statements? Please tick one response.</p> <table border="1"> <thead> <tr> <th></th> <th>Strongly agree</th> <th>Agree</th> <th>Disagree</th> <th>Strongly disagree</th> </tr> </thead> <tbody> <tr> <td>The courts treat everyone fairly.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Australia's judges are independent.</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Strongly agree	Agree	Disagree	Strongly disagree	The courts treat everyone fairly.					Australia's judges are independent.				
	Strongly agree	Agree	Disagree	Strongly disagree												
The courts treat everyone fairly.																
Australia's judges are independent.																
MULTIPLE CHOICE	<p>What is your age? Please circle one response.</p> <p>Age: 12–14 15–16 17–18 Over 18</p>															
OPEN-ENDED	<p>Why do we allow people to appeal court decisions?</p> <p>..</p> <p>..</p> <p>..</p> <p>..</p> <p>..</p>															

Did you know?

Closed questions that ask respondents to rate something against a scale should have an even number of options for such a scale. This is because people often go for the easy option and pick the middle number. An even number of possible ratings (e.g. 1–6, instead of 1–5) means that respondents can't just pick the middle 'neutral' number.

Step 5

Conduct a small trial of your survey to make sure the questions are clear and will achieve your goals. Make any necessary changes based on feedback from the trial.

Step 6

Conduct your survey and collate the results. These can then be analysed for patterns or anything unusual. When you analyse the results, consider working out percentages. For example, the females aged 12–16 surveyed spend 10 per cent of their money on computer games, while the males aged 12–16 spend 25 per cent of their money on computer games.

2.5.3 Let me do it

Complete the following activity to practise this skill.

2.5 SkillBuilder Activity QUESTIONING AND RESEARCHING

In a small group, design and conduct a survey. It is to be a paper-based survey carried out by personal interview. Note that paper surveys should allow enough room for interviewees to write their answers. (If it is difficult to meet in person, you can plan the survey via video chat and create a simple online survey.)

In your group, select one of the following topics for your survey:

- Compulsory voting and the secret ballot
- Lowering the voting age to 16
- Freedom of speech

LESSON 2.6 SkillBuilder: Delivering an oral presentation

LEARNING INTENTION

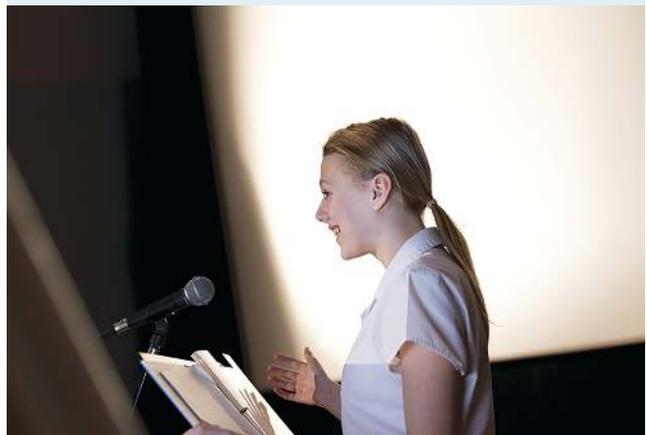
By the end of this SkillBuilder you will be able to **present** a short, structured speech or presentation to a specific audience for a specific purpose.

2.6.1 Tell me

A successful oral presentation starts before a single word has been spoken, with these three stages.

- *Preparation* — Research and plan your speech thoroughly. Being organised will boost your confidence.
- *Visual aids* — Decide on tools like PowerPoint or Keynote and use them effectively without overwhelming your audience.
- *Delivery* — Maintain eye contact and use a confident voice to convey your message clearly.

FIGURE 1 Preparation and delivery are key elements of a successful presentation



2.6.2 Show me

Step 1

The first step in preparing your oral presentation is planning what you will say. Preparation is key to presenting your ideas well to an audience. This is especially true if you are nervous about public speaking.

Use the following table to help you plan the elements of your presentation.

TABLE 1 Preparing for your presentation

Purpose of presentation	To explain how to deliver successful oral presentations
Key message	That through proper practice and planning, you can overcome your potential fear of public speaking
Secondary message	Explain the elements of successful oral presentations: <ul style="list-style-type: none">• <i>Preparation</i> — research and planning• <i>Visual aids</i> — proper use of tools like PowerPoint or Keynote• <i>Delivery</i> — sustained eye contact and confident delivery of the speech

Step 2

Think about the strategies you could use to make sure your audience remembers and understands your message. Visual information can add to your presentation, but if used incorrectly, it can decrease the effectiveness and clarity of your message.

Make sure that any visual aids serve a clear purpose.

The effectiveness of your speech often relates to the connection you make with your audience, so the third step is to practise.

Confident eye contact involves more than occasional glances. Practise your speech thoroughly to ensure you can make and hold eye contact with your audience. This will enhance your delivery. Don't rush; explain your points clearly and carefully.

SkillBuilder discussion

Communicating and reflecting

Can you think of a good public speech? It may have been on TV, the internet or at school. With a partner, make a list of memorable speeches, include old ones and new.

FIGURE 2 Speaking in public can be daunting, but try to connect with your audience even if you are feeling nervous.



2.6.3 Let me do it

Complete the following activity to practise this skill.

2.6 SkillBuilder Activity

COMMUNICATING AND REFLECTING

Investigate how citizens can participate in Australia's democracy. Working either individually or in pairs, you will need to deliver a five-minute oral presentation in which you discuss your chosen methods and why they are valuable to a democracy. You could present either in person to your class, or by video.

Draw up a table (similar to **TABLE 1**) to help you prepare and plan your speech. Then use the procedure discussed in this SkillBuilder to ensure that your presentation is successful. You can also complete a step-by-step worksheet from the Resources panel to help you with this task.

LESSON 2.7 Review

2.7.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

2.2 Civics and Citizenship concepts and skills

- Democracy is a political system in which citizens choose the way in which they are governed.
- Democratic values are the standards or instructions that shape a democracy.
- Australia's system of government is based on the British Westminster system.
- Legal and political systems need everyone within the system to meet certain responsibilities in order for everyone to make the most of their rights.
- Justice, as a concept, means that people are treated fairly and in a way that is morally right in the eyes of the law.
- Participating in political and legal processes is an important part of a society. This occurs in a range of ways, such as participating on a jury, expressing your views to your political representatives, protesting, or voting in elections.
- The skills you will develop across all your HASS subjects fall into four main groups:
 - *Questioning and researching*: This involves forming strong and well focused research questions and ensuring all of your notes are clear, accurate and well referenced.
 - *Analysing*: This involves examining a variety of sources including political advertising, speeches, media releases, court judgements, cartoons and news reports.
 - *Evaluating*: This involves exploring different perspectives or points of view and how these are revealed in a source of information.
 - *Communicating and reflecting*: This involves developing your ability to reflect on findings from your research and analysis, and formulating and presenting descriptions, explanations and arguing a point of view, using relevant terminology.

2.7.2 Key terms

democracy a form of government in which the people determine how they will be governed
direct action showing your disapproval or disagreement with the government and their policies by directly trying to influence their decisions and the views of the public, for example through protesting
values individual beliefs that help to guide our actions

2.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview.

Why is it important to study Civics and Citizenship, and what skills do I need?

1. Now that you have completed this topic, what is your view on the questions? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry questions, outlining your views.

2.7 Review exercise

Learning pathways

LEVEL 1

1, 4, 7, 8, 11, 14

LEVEL 2

2, 3, 9, 10, 12

LEVEL 3

5, 6, 13, 15

REMEMBER AND UNDERSTAND

- From the following, identify the most valuable benefit of studying Civics and Citizenship.
 - Being able to write political speeches
 - Being able to make informed decisions
 - Being able to interpret media messages
 - Being able to remember historical dates
- Which skill involves understanding different perspectives and using evidence to form judgements about political issues?
 - Communicating and reflecting
 - Analysing
 - Evaluating
 - Understanding cultural influences
- Why is it important to develop critical thinking skills in Civics and Citizenship?
 - To memorise important laws
 - To understand political arguments and make informed choices
 - To gain popularity in political discussions
 - To choose political leaders based on personal preferences
- Which HASS skill is most likely to be key to sharing ideas and opinions effectively in debates and discussions?
 - Communicating and reflecting
 - Investigating issues
 - Organising
 - Making informed decisions
- What is the main purpose of researching issues?
 - To gain new knowledge for writing essays
 - To develop personal opinions on issues
 - To gather information and evaluate the pros and cons of different viewpoints
 - To memorise laws and rules
- Which of the following is a key reason why Civics and Citizenship education is important?
 - It teaches how to win elections.
 - It encourages active participation in society and informed decision-making.
 - It helps students memorise political figures.
 - It focuses on learning political theory only.
- Civics and Citizenship education helps individuals to mostly develop the ability to:
 - lead political campaigns.
 - work together to make decisions for the common good.
 - follow rules without questioning authority.
 - focus solely on individual interests.

8. Do young people under 18 have rights under the law?
 - A. Yes, they have both rights and responsibilities.
 - B. No, they do not have any rights.
 - C. They only have responsibilities.
 - D. They have rights but no responsibilities.
9. How can citizens actively participate in the political and legal systems of their country?
 - A. By voting in elections
 - B. By serving as witnesses or jurors
 - C. By participating in referendums
 - D. All of the above
10. Identify how Civics and Citizenship education contributes to personal development.
 - A. It teaches only historical facts.
 - B. It helps students become informed and responsible citizens who can contribute to their communities.
 - C. It focuses only on memorisation of political figures.
 - D. It trains students to follow orders.

ANALYSE AND APPLY

11. **Identify** the four HASS skills, and **explain** how each one contributes to being an informed citizen.
12. **Explain** why it is important for students to engage in discussions about political and social issues in Civics and Citizenship education.
13. **Explain** how critical thinking skills can help individuals assess the validity of information presented in the media.

EVALUATE AND COMMUNICATE

14. If you were to research a controversial political issue, **explain** what steps you would take to ensure that your information is reliable and balanced.
15. **Explain** how Civics and Citizenship education influence the way people participate in their local communities or governments. Do you think it should be mandatory in schools? Why or why not?

Answers and sample responses for this topic are available online.

3 Freedom and democracy

LESSON SEQUENCE

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3.3 How we form a government	92
3.4 How citizens participate in Australia's democracy	99
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LESSON 3.1 Overview

INQUIRY QUESTION

How can active and informed citizenship be achieved in Australia, and what is the process for forming a government?

In Australia, our citizens participate in a **democracy**. This includes being able to vote in elections, contact local representatives from the government, join political parties and stand as an independent politician.

We expect our elected representatives in parliament to reflect our values and represent us honestly. This expectation is supported by the **separation of powers**, which divides the government into three branches, ensuring that no single group has too much control over decision-making.

Nevertheless, our voting systems and **democratic** processes allow us the **right** to challenge, question and take direct action against issues we may not agree with.

learn on

-  **Pre-test**
Online pre-test
-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital document**
Key terms glossary
-  **Video eLesson**
Freedom and democracy

SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING



LEARNING INTENTION

By the end of this lesson you should be able to **identify** the key freedoms of our democracy such as freedom of speech, association, assembly, religion and movement.

Tune in

Democratic freedoms are important and apply to all Australians.

1. **What rights do you have in the classroom?**
2. **What rights do you think your teacher has in the classroom?**
3. **If you had to make rules for your class, what would be your top three rules for the teacher and students?**
4. **Who has the responsibility to ensure these rules are maintained and followed?**

FIGURE 1 What rules and rights exist in a typical Year 7 classroom?



3.2.1 The rule of law

The **rule of law** is a legal principal that all citizens are subject to the law and equal before the law. The law applies equally to all citizens regardless of status or wealth. Under the rule of law, the protection of our rights and freedoms comes from a number of sources. The **Australian Constitution** includes provisions that protect some of our basic rights such as freedom of religion and trial by jury. In addition, state and federal governments have passed **laws** aimed at protecting many of our rights as citizens, such as making it illegal to discriminate against any person based on personal characteristics such as gender or race.

Australia’s democracy is built on important freedoms that let people participate in society and express their ideas and their views. These include the freedoms listed in **TABLE 1**.

TABLE 1 Examples of democratic freedoms

Freedom of speech	Freedom of association	Freedom of assembly	Freedom of religion	Freedom of movement
Share information	Join groups or organisations	Meet peacefully	Practise any religion	Travel within Australia
Express opinions freely	Form political parties	Organise protests	Choose no religion	Choose where to live
Debate ideas openly	Create community groups	Hold public meetings	Choose religious beliefs	Cross state borders
Criticise government decisions	Work with others	Gather for events	Express religious views	Leave and return to Australia

The Constitution also makes sure Australia is governed as a democracy in the following ways:

- Representatives in parliament are elected by the people’s direct vote.
- Each person has only one vote for each house of parliament, so all voters are equal.

- Federal elections are held at minimum every three years.
- All laws passed by parliament must be agreed upon by a majority of members in each house, representing the wishes of most voters.
- There is a division of powers between the federal and state governments, spreading power between these two levels.
- The courts are independent of the government, so they can enforce the law fairly and equally to all.

3.2.2 How to have your say

One of our key rights as Australian citizens is the right to actively take part in democratic processes. We can do this in several ways. First, there is our right to vote — a right that can be exercised by all Australian citizens over the age of 18.

SkillBuilder discussion

Evaluating

1. What is meant by a 'right' and a 'responsibility'?
2. With a partner list the benefits of voting.
3. Explain in what ways voting can impact government policies and decisions at the state, federal and local levels.

FIGURE 2 Voting is a democratic right.



Then there is our right to **freedom of speech**, which allows us to express our opinions through a variety of methods. We can write letters to the newspapers, we can phone in to talkback radio, and we can publicise our views on social media using Facebook or X or create our own website or blog. Your ability to openly access websites, emails and social media from various devices promotes the ability to express an opinion on any issue, to anyone, anytime and anywhere. In the same way, you can access the opinion of others or seek information continuously. In addition, there are opinion polling companies that conduct surveys of ordinary people on all sorts of issues. These results are often published and accessible to the public.

Limits to freedom of speech

In Australia, our right to freedom of speech is limited by the law. These legal boundaries are set to prevent hate speech, bullying and harassment, defamation, and obscenity.

3.2.3 The right to disagree

Not everyone will agree with actions taken by our governments. In a democracy — where we all have **freedom of conscience**, freedom of speech, **freedom of association** and **freedom of assembly** — we have the **right** to express that disagreement. When a person (or group of people) expresses that disagreement publicly, it is known as democratic **dissent**.

Expressing dissent is one of the ways in which we can participate in a democratic society under our Australian right. While we are required to obey the law, we are not required to blindly follow whatever the government tells us. Every individual is free to undertake a range of activities in an attempt to have a particular law changed — for example, to organise and participate in a demonstration or public rally, or to sign a **petition** supporting a change in the law.

Participation in a rally or protest march allows many people who disagree with particular government policies to express their point of view. Such protests are also aimed at changing those policies and convincing other undecided citizens to support their cause.

Limits to freedom of assembly

While holding meetings in a hall or similar space generally has no restrictions, assembling in public areas might limit access for others. For example, a protest march on a busy main road may cause traffic problems. Thus, some state governments have imposed restrictions on freedom of assembly. Most agree that any assembly or protest should be peaceful and not threaten bystanders. Public protests in Australia are usually well publicised in advance to attract supporters and minimise disruption to normal activities.

Limits to freedom of movement

Freedom of movement, like other rights, is limited by law. We can move within most public spaces, but not trespass on private property. We can travel between towns, cities and states, and leave Australia for work or holidays, with the right to return.

Restrictions may occur to protect the public. Before trial, an accused person may be prevented from leaving the state or country. After natural disasters, people may be barred from entering affected areas. During custody disputes, courts may limit children's movement to ensure access to both parents.

SkillBuilder discussion

Analysing

1. Using your understanding of protest, and considering **FIGURE 3**, can protests change the rules or opinions of others?
2. Are there rules for holding a protest march?
3. Why should protests be peaceful?

FIGURE 3 'Change the date' protests



3.2.4 Freedom of religion

Freedom of religion is protected by the Constitution. This means the government cannot force anyone to follow any one religion, nor can it prevent anyone from freely practising their own religion.

3.2 SkillBuilder activity ANALYSING

1. Have you ever attended or witnessed a protest, march or other kind of demonstration? What was the issue?
2. Look at **FIGURE 4**. What do you think is the purpose of this demonstration? In your answer, consider both what the people are protesting against and what they are protesting for.
3. Mind-map or list any current issues in society you think that young people should be challenging.

FIGURE 4 Students protesting in Sydney



3.2 Exercise

learn **on**

Learning pathways

■ **LEVEL 1**

1, 2, 4

■ **LEVEL 2**

3, 5, 6, 7

■ **LEVEL 3**

8, 9, 10, 11

REMEMBER AND UNDERSTAND

1. Identify the meaning of the term *democracy*.
 - A. A system of government where power is held by a single ruler
 - B. A system of government where the citizens exercise power by voting
 - C. A political system based on hereditary rule
 - D. A form of government in which the military controls power
2. Complete the following passage by **selecting** the correct words from the options provided.

As showing **attitude** / **dissent** / **rebellion** / **obedience** is an essential part of democratic society, it is **reasonable** / **unreasonable** that some groups and individuals would feel the need to voice their opposition to government policies and decisions.
3.
 - a. **Identify** two limits or bounds of law.
 - b. **Explain** how they could reasonably be placed on dissent in Australian society.
4.
 - a. In a democratic society, individuals are guaranteed certain rights, which include the freedom of speech and the right to vote. True or false?
 - b. Provide reasoning to support your response
5. **Identify** and **explain** one way in which the Australian Constitution protects our rights.

ANALYSE AND APPLY

6. **Explain** how dissent directed towards government policies or actions can have a positive influence on Australian democracy.
7. **Explain** why the freedoms of association, assembly and movement are important in maintaining Australia as a democratic society.
8. **Explain** two reasons why freedom of speech is important in supporting democracy in Australia.

EVALUATE AND COMMUNICATE

9. In both the anti-conscription campaign during the Vietnam War (1970s) and the Franklin blockade (1980s), people broke the law to achieve their aims. Their campaigns were ultimately successful. **Explain** whether it is appropriate for people to break the law to achieve the changes they want. **Justify** your answer.
10. **Suggest** one way in which freedom of assembly might be restricted by the bounds of law.
11. **Suggest** one circumstance when it might be reasonable to restrict a person's freedom of movement.

Answers and sample responses for this topic are available online.

LESSON 3.3 How we form a government

LEARNING INTENTION

By the end of this lesson you should be able to **outline** the election process including compulsory voting and preferential voting as key features of Australia's democracy.

Tune in

Australian federal elections use a preferential voting system. This means that voters enter their choices in order of preference, with 1 being the highest. To make every vote count, voters should use each number only once.

1. **Have you ever attended a vote (e.g., with a parent or carer)? What did you see there?**
2. **There are many ways to vote incorrectly. Brainstorm ways which you think the voting slip in FIGURE 1 could be made invalid. Hint: use the instructions on the top of the ballot paper to support your answer.**
3. **Describe how you would complete the voting slip correctly.**

FIGURE 1 An incomplete voting slip

Number the boxes from 1 to 6 in the order of your choice

- | | |
|--------------------------|---------------------------------|
| <input type="checkbox"/> | AGATHA, Alloysius
Blue party |
| <input type="checkbox"/> | BARRY, Beatrice
Red party |
| <input type="checkbox"/> | CALORMEN, Chris
Yellow party |
| <input type="checkbox"/> | DAVIDS, David
Purple party |
| <input type="checkbox"/> | EUGENIDI, Eva
Orange party |
| <input type="checkbox"/> | FAN, Fai
Grey party |

3.3.1 The electoral system

Our system of government is a democracy. This means it is based on the idea that we elect representatives to make laws for us. Because we vote for them, these representatives are expected to make laws that we agree with. If they do not do that, then we can vote for different representatives at the next election. Voting is compulsory in Australia. Those with the right to vote have the opportunity to elect representatives to:

- the Commonwealth Parliament in Canberra
- the state or territory parliament sitting in each capital city
- local councils in the city, town or shire in which the electors live.

All Australian citizens aged 18 years or over are legally required to enrol to vote. You can enrol any time after your sixteenth birthday, either online or by filling in a paper form.

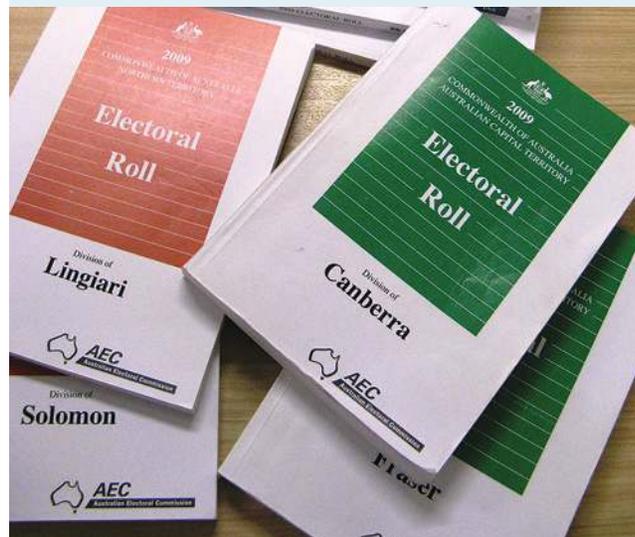
The secret ballot

Australia was one of the first places to have a secret ballot. This means voters can keep their votes private. Before, voters had to announce their votes publicly, which led to intimidation and bribery. In the 1850s, most Australian colonies started using the secret ballot. Voters now fill out their papers in private and place them in a box where votes are mixed together.

Compulsory voting

Compulsory voting was introduced in Australia in 1924. Now, all citizens over 18 must vote in federal, state and territory elections. Some states also require voting in local elections. Not voting without a good excuse can result in a fine.

FIGURE 2 All registered voters have their names and addresses recorded in the electoral roll.



Alternative voting methods

To help people who can't vote on election day, there are other options:

- Pre-poll vote: Voters can go to early voting centres up to three weeks before the election.
- Postal vote: Voters can apply to receive and send their votes by mail.
- Absentee vote: Voters can vote interstate or overseas at designated places.

These methods ensure everyone can vote, even if they aren't in their home area on election day.

One vote, one value

Each person has one vote, making all voters equal. The number of representatives and senators varies due to the Australian Constitution.

Preferential voting and proportional representation

Preferential voting

In **preferential voting** — like Australian federal elections — voters must nominate candidates in their order of preference from highest to lowest. In full preferential voting, this means numbering every candidate on the voting slip from high to low. In optional preferential voting, voters can instead nominate their main preferences without numbering every candidate.

Proportional representation

Senate elections use **proportional representation**. Voters may vote ‘above the line’ or ‘below the line’. Voting above the line requires completing at least six boxes in preferential order. Voting below the line requires at least 12 boxes to be numbered. The order of the boxes on the paper is random. To win a seat, senators have to win a set proportion (or quota) of the votes.

FIGURE 3 An example of a Senate ballot

SENATE POSTAL BALLOT PAPER
 ELECTION OF 6 SENATORS

You may vote in one of two ways

either

By placing the single figure 1 in one and only one of these SQUARES. Indicate the only ballot you wish to adopt as your vote.

A	B	C	D	E	F	G	H
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TASMANIAN INDEPENDENT SENATOR BRIAN HARRADINE	AUSTRALIAN LABOR PARTY	TASMANIA SENATE TEAM	LIBERAL/ NATIONAL PARTY	TASMANIAN GREENS	CALL TO AUSTRALIA (FRED NILE) GROUP	NATURAL LAW PARTY	AUSTRALIAN DEMOCRATS

or

By placing the numbers 1 to 21 in the order of your preference.

A	B	C	D	E	F	G	H	Ungrouped
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TASMANIAN INDEPENDENT SENATOR BRIAN HARRADINE	AUSTRALIAN LABOR PARTY	TASMANIA SENATE TEAM	LIBERAL/ NATIONAL PARTY	TASMANIAN GREENS	CALL TO AUSTRALIA (FRED NILE) GROUP	NATURAL LAW PARTY	AUSTRALIAN DEMOCRATS	
HARRADINE Brian TASMANIAN INDEPENDENT SENATOR BRIAN HARRADINE	TATE Michael AUSTRALIAN LABOR PARTY	SPROULE Ash TASMANIA SENATE TEAM	BAUME Michael LIBERAL	HENDERSON Judy TASMANIAN GREENS	HOPSON Philip CALL TO AUSTRALIA (FRED NILE) GROUP	BROSZCZYK Greg NATURAL LAW PARTY	HARMSEN Pazy AUSTRALIAN DEMOCRATS	JAMIESON Ian INDEPENDENT
	COATES John AUSTRALIAN LABOR PARTY	McSHANE Frances TASMANIA SENATE TEAM	TIERNEY John LIBERAL	JONES Peter TASMANIAN GREENS	HOPSON Janette CALL TO AUSTRALIA (FRED NILE) GROUP	DAVIES Caroline NATURAL LAW PARTY	STEPHEN David AUSTRALIAN DEMOCRATS	
	MURPHY Shayne AUSTRALIAN LABOR PARTY		MACDONALD Sandy NATIONAL PARTY	FRY Mar on TASMANIAN GREENS				
	AULICH Terry AUSTRALIAN LABOR PARTY		PAYNE Marie Ann LIBERAL					

Fold the ballot paper, place it in the envelope addressed to the Divisional Returning Officer and fasten the envelope.

AEC

SkillBuilder discussion

Analysing

1. What are the two voting options in Senate elections using proportional representation?
2. Work with a partner to describe the difference between full and optional preferential voting in Australian federal elections.
3. At what age must Australian citizens enrol to vote, and how can they do it?

3.3.2 The role of members of parliament

Members of parliament in the local community

Members of parliament perform many jobs besides debating and voting in parliament. They spend much time in their **electorate**, helping the community and individual voters. Often, members of parliament are approached by ordinary citizens requesting them to take some action and work to make improvements in that community.

Federal parliament sits for only about 18 to 20 weeks per year, so many members of parliament can often spend as much as 30 weeks of each year in their local electorates.

Helping the community

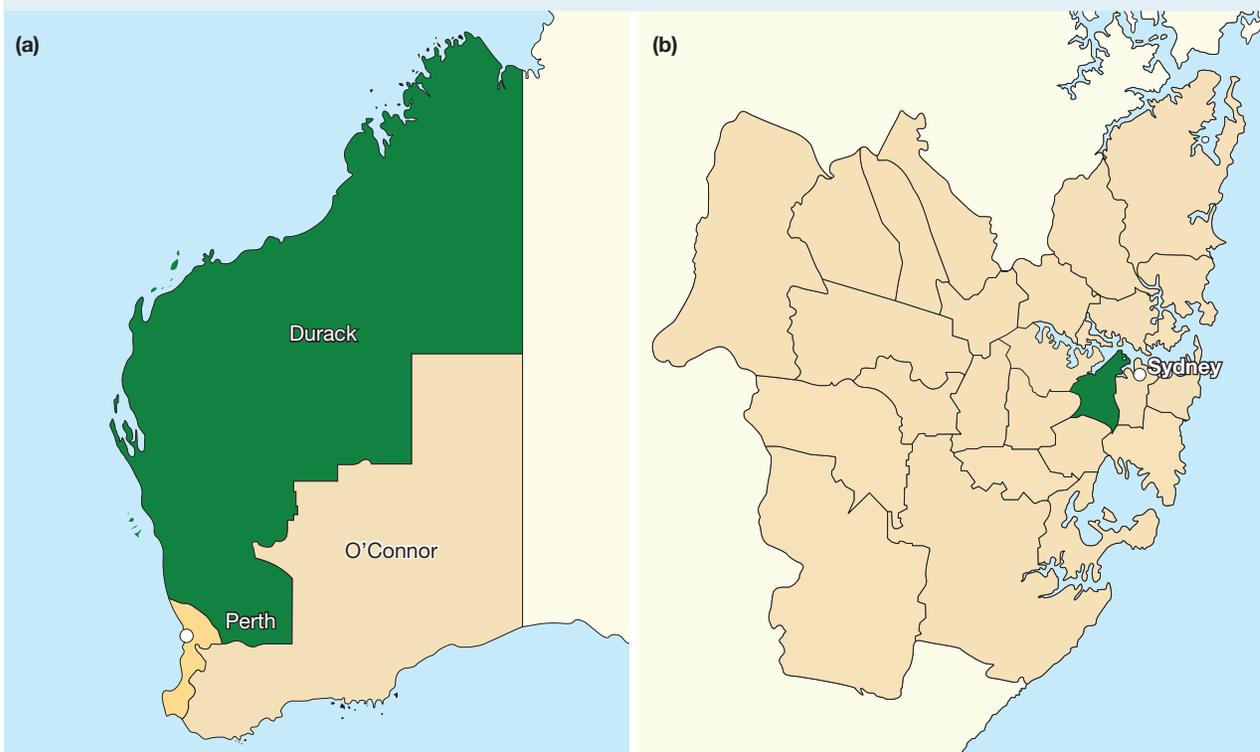
Because each electorate has a similar number of voters, the electorates can vary in geographical size depending on how densely populated they are. For example, the smallest Australian electorate in terms of geographical size is Grayndler, which is in the south-eastern suburbs of Sydney. It has a total area of 32 square kilometres.

The largest in area is Durack, which takes up most of country Western Australia. It covers more than 1.6 million square kilometres. As you can imagine, it is much harder for the member for Durack to maintain contact with the voters than it is for the member for Grayndler. Nevertheless, both members will attempt to perform similar duties in relation to their respective communities.

FIGURE 4 Members of parliament often perform official opening ceremonies in their electorates.



FIGURE 5 The divisions of (a) Durack in Western Australia and (b) Grayndler in New South Wales



Every member of parliament has an office in their electorate. Members representing very large electorates such as Durack will probably have electorate offices in more than one town. No matter the size, members visit schools, clubs and community groups to help and support local projects, such as building a new road or improving a hospital. They work hard to make their communities better places to live.

Helping individual voters

Members also help individual voters with problems involving government departments, such as Centrelink or immigration. They write letters or make calls to the relevant government minister to help get issues resolved quickly. If a member personally intervenes on behalf of someone in his or her electorate, this will usually get high-priority attention from the government department.

Providing a direct link to parliament

Voters can also raise concerns about bigger issues, like coal seam gas mining. Members can take these issues to parliament for investigation and new rules.

Members often meet with constituents in Parliament House, Canberra, and help with petitions to the House of Representatives. These petitions can bring important issues to the attention of the parliament.

It's important for members to keep strong ties with their community to be re-elected.

SkillBuilder discussion

Evaluating

1. Mind-map some of the responsibilities members of parliament might have in their electorate offices.
2. Suggest how members of parliament can assist individual voters with government-related issues.
3. Give two reasons why it is important for members of parliament to be present in their local communities.

FIGURE 6 Members of parliament have electorate offices located within their electorates, often on high streets.



3.3.3 How governments are formed and lost

In democratic countries like Australia, governments can be formed and lost in many ways according to the needs, wants and actions of the citizens. There are various factors which impact upon whether a party or coalition of parties have the right to form government.

Parliamentary majority

Parliamentary majority requires a party or coalition (a group of parties) to have the support of over 50 per cent of the members in the House of Representatives. If a government has a majority, it can pass Bills and carry out policies. Because there are 150 seats in the House of Representatives, a parliamentary majority requires 76 seats (half of the total plus one).

The role of the opposition

The official opposition is the party or coalition which has the next highest number of seats. If the government loses the **confidence** of the House of Representatives or the citizens, the opposition would step into the role of government, with its leader as the new prime minister. The shadow ministry, led by the leader of the opposition, is a mirror image of the government ministry. The purpose of the opposition is to carefully examine, criticise and challenge the government in power.

Hung parliament

A hung parliament occurs when no party or group has over 50 per cent of the seats in the House of Representatives. This means that no party can pass laws without getting support from independents. During a hung parliament, the two main parties or coalitions will attempt to convince independents to support them so that they can get the 76 seats needed for a majority.

Minority governments

When a major party does not hold an outright majority, the support of a minor party or independent becomes crucial for passing Bills or motions. This situation allows strong negotiations between a major and a minor party, meaning smaller parties can have a significant impact on legislation and government decisions. An example of this **balance of power** is evident in the Senate (sometimes referred to as the house of review), where minor parties have often played significant roles in shaping policy outcomes.

3.3 SkillBuilder activity COMMUNICATING AND REFLECTING

In this activity you will develop a plan of action to raise an issue and make sure that your voice is heard. You will also need to provide a consultation and feedback process to make sure that everyone involved has an opportunity to respond. This activity can be conducted 'for real' or just as planning up to question 5.

Have your say

Working in a group of up to three people, complete the following activities.

- 1. Brainstorm** a variety of issues in:
 - a. this class
 - b. your school
 - c. your local community
 - d. your national community
 - e. the world.
- 2.** Choose *one* issue from your brainstorm to focus on. It does not matter at which level; choose the issue you are most passionate about.
- 3. Identify** the stakeholders: who are the people involved in the issue? Consider both those directly impacted by the issue and those who have some power to resolve or change the issue.
- 4. Propose** a way to gather information to ensure a range of voices are heard (i.e. not just your opinion). For example, you could create a survey, petition or website to collect information.
- 5. Decide** who you should communicate your information with: who from your list of stakeholders could use this information to act? **Identify** who would benefit from receiving the information.

Learning pathways

■ LEVEL 1

1, 2, 3, 5, 6

■ LEVEL 2

4, 7, 8

■ LEVEL 3

9, 10

REMEMBER AND UNDERSTAND

1. **Define** *electorate*.
2. Australia was one of the first places to have a secret ballot, allowing voters to keep their votes private. True or false?
3. **Identify** the voting method that allows voters to apply and send their votes by mail.
 - A. Pre-poll vote
 - B. Pre-poll vote
 - C. Postal vote
 - D. Accessory vote
4. **Outline** the role elected representatives play in government.
5. **Explain** two different ways of forming government.

ANALYSE AND APPLY

6. **Identify** the particular right that Australians have that makes this country a democracy.
7. **Explain** why the Senate is elected in a different way from the House of Representatives.
8. Members of the Australian Parliament are paid over \$200 000 per year. Some people argue that, as they spend less than half the year in Canberra, and only four days a week in Parliament when they are there, they are overpaid. **State** whether this is a fair assessment of a member's work. Give two reasons to **justify** your opinion.

EVALUATE AND COMMUNICATE

9. **Explain** what is meant by *hung parliament* and how it influences the formation of government in Australia.
10. **Explain** the role of the opposition in the Australian parliamentary system and evaluate how it can impact the current government.

Answers and sample responses for this topic are available online.

How citizens participate in Australia's democracy

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how to participate in Australia's democracy, including in the electoral system
- **outline** how lobby groups work
- **identify** the role of direct action.

Tune in

Young people can help make big changes in the world. They have the right to speak up about issues that affect them.

1. **What is a change that you'd like to see in your school or local community?**
2. **Do you feel like you can do anything about it? Why or why not?**
3. **If the problem is bigger than you first thought, who else can you involve in solving the problem?**

FIGURE 1 Student activists voice their opinions.



3.4.1 Using the electoral system

Citizenship is not just a legal status. It is also a means to get involved and be part of the decision-making in our country. As a citizen, you are on the **electoral roll**, and this means that you can participate by:

- enrolling to vote when you turn 18
- voting in elections (federal, state and local)
- working at polling places
- joining political parties
- running as a political party candidate.

At a different level, active citizenship means getting involved with your local community. Active citizenship can be as small as organising a clean-up of your local street, park or even your school. Or, it can be as big as educating people about Australia's democratic values, skills and participation. Active citizenship involves six broad categories of political participation, shown in **FIGURE 2**.



FIGURE 2 The six categories of political participation

Voluntary work	Informal political action	Activities with political implications	Awareness-raising	Altruistic acts	General social participation
<ul style="list-style-type: none"> • Formal or informal voluntary work 	<ul style="list-style-type: none"> • Activities focused on bringing about or preventing change 	<ul style="list-style-type: none"> • Activities that have political implications but not focused on change 	<ul style="list-style-type: none"> • Informing or challenging other opinions 	<ul style="list-style-type: none"> • Acts of kindness, such as giving blood or donating to charity 	<ul style="list-style-type: none"> • Being a good neighbour • General solidarity with others

SkillBuilder discussion

Questioning and researching

1. How does voluntary work contribute to the political process in Australia?
2. What role do protests and demonstrations play in influencing public opinion in Australia?
3. How can contacting politicians help address community issues in Australia?

3.4.2 Contacting representatives

Every Australian is represented by elected officials at three levels of government. These representatives work for their communities and want to hear from citizens about important issues. There are ways for you to get involved and contact your representative, such as:

- writing letters and emails
- making phone calls
- requesting meetings
- attending community forums and meetings
- following and engaging on social media.

Don't just show up — make sure you do your prep work. Make sure you research your issues, have clear points to make and suggest possible solutions. It's also important to be professional and courteous. Write or speak clearly, be polite and respectful and make sure you follow up if needed.

3.4.3 Working with groups

Sometimes joining with others can be more effective than acting alone. Australia has many **interest groups** and **lobby groups** that work to influence government decisions.

Lobby groups often:

- research issues deeply
- meet with politicians
- run media campaigns
- propose policy changes.

Examples include business organisations, unions and professional associations.

3.4.4 Taking direct action

Sometimes citizens can take peaceful **direct action** to create change. This can be more public than other forms of participation.

When many feel that an issue requires immediate action, or they believe that the government is making the wrong decisions, people will often take direct action to influence government actions. Direct action usually consists of some form of public demonstration and can sometimes involve citizens deliberately breaking the law to bring their views to public attention.

FIGURE 3 Types of direct action

Peaceful protests	Public campaigns	Effective direct action
<ul style="list-style-type: none">• Public rallies• Marches• Sit-ins• Silent demonstrations	<ul style="list-style-type: none">• Petitions• Letter-writing campaigns• Media engagements• Public meetings	<ul style="list-style-type: none">• Has clear goals• Stays within the law• Respects others' rights• Is well organised

SkillBuilder discussion

Evaluating

'Direct action is more effective than writing to politicians.' Discuss.

Look at **FIGURE 3**.

1. When might direct action work better?
2. When might contacting representatives be more effective?
3. What examples can you think of where different methods have worked?
4. How might different methods work together?

CASE STUDY

Student climate strikes

School Strike 4 Climate is a global movement of students who demonstrate and protest against policies that promote fossil fuels and industries which damage the environment. The movement gained traction across the world in 2018, when Greta Thunberg — then a pupil in a Swedish school — staged a protest outside the Swedish parliament building.

A global strike followed on 15 March 2019, which included over a million strikers across 125 countries, including Australia. School Strike 4 Climate (SS4C) operates in Australia and makes the following demands of politicians:

- Net zero by 2030, which means no new coal, oil or gas projects, including the Adani mine
- 100 per cent renewable energy generations and exports by 2030
- Funding of a transition and job creation for all fossil-fuel workers and their communities

Is it legal?

In media coverage of the climate strikes, a number of politicians claimed that the students were acting illegally. The New South Wales education minister informed a news reporter that, 'You simply can't strike if you don't have a job ... the law is very clear: this is a notified school day, kids should be at school.'

However, statements like this were countered by Greta Thunberg and organisations like the Australian Youth Climate Coalition. The right to strike is broadly considered in democratic countries to be protected, defending the social health and economic interests of workers. Australian Lawyers for Human Rights supported the strikes, recognising the young people's rights to peaceful assembly and freedom of speech.

Is it effective?

On 15 March 2022, federal minister Sussan Ley successfully appealed against a 2021 Federal Court of Australia decision that the minister has a duty of care to young people when assessing fossil fuel developments. As bushfires and floods continue to impact young people's lives in Australia, many young people see it as their responsibility to keep the issue of the climate crisis on the agenda.

SS4C Australia continues to operate with planned strikes, sit-ins and social media events. According to a study from the University of Sydney, 'Students learn through their participation in striking, in contrast to the often-insufficient climate change education taught in schools.' At the time of publication, SS4C is still going strong, empowering young people to take action.

SkillBuilder discussion

Communication and reflecting

Read the 'Student climate strikes' case study.

1. What are the three key demands made by School Strike 4 Climate (SS4C) in Australia?
2. Why did some politicians claim the student strikes were illegal?
3. What was the outcome of Sussan Ley's appeal in 2022, and why is it significant?
4. Do you think students should be allowed to strike during school hours for political or environmental causes? Why or why not?
5. How effective do you think student-led movements like SS4C are in influencing government policy?
6. If you were a school principal, how would you respond to students wanting to participate in a climate strike?

3.4 SkillBuilder activity

EVALUATING, COMMUNICATING AND REFLECTING

Choose an issue in your local area that needs changing. Examples could include: public transport, street lighting, availability of other community amenities, such as pools, skate parks, recreation centres etc.

1. **Investigate** the issue:
 - a. What exactly needs to change?
 - b. Who has the power to make this change?
 - c. What evidence supports your position?
2. **Propose** your approach:
 - a. What participation methods would work best?
 - b. Who could you work with?
 - c. What steps would you take?
3. Present your plan to the class explaining why you chose certain methods over others.

3.4 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 6

■ LEVEL 3

7, 8

REMEMBER AND UNDERSTAND

1. Which of the following is *not* a way citizens can participate in the electoral system?
 - a. Running as a candidate
 - b. Working at a polling station
 - c. Making laws
 - d. Voting in an election
2. **Name** all the correct examples of direct action:
 - a. Peaceful protests
 - b. Writing to politicians
 - c. Public rallies
 - d. Voting in elections
3. **Explain**, in your own words, what a lobby group does.
4. **Describe** two different ways you could contact your local member of parliament.
5. **Explain** how the separation of powers prevents any one group from becoming too powerful in Australia's democracy.

APPLY AND ANALYSE

6. **Examine** three different methods of participating in Australia's democracy. What are the strengths and weaknesses of each? Organise in a table.

EVALUATE AND COMMUNICATE

7. **Propose** which participation method would be most effective for:
 - a. saving a local park
 - b. changing a national law
 - c. improving school facilities.

8. A local council plans to demolish a historic building in order to build a shopping centre. Complete the table below comparing the positives and negatives of different participation methods for concerned citizens.

Method of participation	How it could be used	Positives	Negatives
Electoral system			
Contacting representatives			
Working with groups			
Direct action			

Answers and sample responses for this topic are available online.

LESSON 3.5 Inquiry: Does Australia need a bill of rights?

LEARNING INTENTION

By the end of this lesson you should be able to **summarise** the arguments for and against Australia's need for a bill of rights.

Background

In this inquiry you will **investigate** whether Australia needs a bill of rights.

Did you know that many countries throughout the world have a bill of rights or charter of rights to protect the human rights and freedoms of their citizens? Australia is one of the few western democracies that does not have a bill of rights.

FIGURE 1 The United States, Britain, Canada and New Zealand are all countries with similar democratic systems to us that have a bill of rights or a charter of rights.



A bill of rights can be part of a country's constitution, in which case it can be difficult to change; it can also be legislation passed by parliament, which can be changed by that parliament at any time, if most members of parliament support that change.

Many people say that a constitutional bill of rights would better protect the rights of citizens, because it cannot be easily changed. Victoria, Queensland and the Australian Capital Territory have all introduced legislated charters of rights.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

- What is a bill or charter of rights?
- How does a bill or charter of rights protect rights and freedoms?
- How does a bill of rights operate in another country?
- Why doesn't Australia have a bill of rights?
- How are rights and freedoms protected in Australia (e.g., freedom of speech, right to silence)?
- What can people do in Australia and overseas if they think their rights have been affected by the actions of government or someone else?
- Now choose one of your questions as your inquiry question.

Step 2: Analysing

Begin by **investigating** the bill or charter of rights in one of these countries:

- Britain
- Canada
- New Zealand
- United States of America

Make notes under your inquiry questions.

Step 3: Evaluating

- **Propose** possible reasons for Australia having a bill of rights.
- What options does Australia have for obtaining a bill of rights?
- **Explain** how a bill of rights supports a democratic society.
- **Create** a table that shows the advantages and disadvantages of having a bill of rights.
- How are rights protected in Australia?
- Are these protections enough, or does more need to be done?

Step 4: Communicating and reflecting

Select a format to **present** your point of view. This could be a short video, a mock TV interview, a PowerPoint presentation, or a similar format.

LESSON 3.6 Review

3.6.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

3.2 Our democratic rights and freedoms

- Key democratic freedoms in Australia include freedom of speech, association, assembly, religion and movement.
- We can participate in democracy through voting, direct action and petitions that can influence government policies and decisions.
- Respectful and lawful expression of dissent is important in maintaining a democratic society.

3.3 How we form a government

- All citizens over the age of 18 have the right to vote in Australian elections, although they need to register to take full advantage of this right.
- Preferential voting means that voters nominate candidates in the order they prefer from highest to lowest.
- Local members are voted in to help their constituents.
- A parliamentary majority requires that a party or group holds over 50 per cent of the seats in the House of Representatives.

3.4 How citizens participate in Australia's democracy

- In a democracy, citizens have the right to disagree with those in power.
- There are many lawful ways to express dissent, including protests.
- Protests and petitions can have an impact, and lead to laws being changed.

3.5 Inquiry: Does Australia need a bill of rights?

- Australia is one of the few Western democracies that does not have a bill of rights. In this Inquiry students investigate a bill of rights in another country and whether one is needed in Australia.

3.6.2 Key terms

Australian Constitution the foundational legal document that establishes the framework for the governing of Australia

balance of power the distribution of authority and responsibilities among the three branches of government

confidence the level of support that the government has from the parliament, which is necessary for the government to remain in power

democracy a form of government in which the people determine how they will be governed

democratic supporting democracy, or the system of government where supreme power is vested in the people and exercised directly by them or by their elected representatives under a free electoral system

direct action showing your disapproval or disagreement with the government and their policies by directly trying to influence their decisions and the views of the public, for example through protesting

dissent disagreeing with a decision, opinion or set of beliefs, and expressing this disagreement

electoral roll an official list of people who are registered and eligible to vote in elections

electorate an area of Australia that elects one member to parliament

freedom of assembly the right to gather peacefully in public for meetings, protests, or events

freedom of association the right to join or form groups, clubs, or organisations voluntarily

freedom of conscience the right to think and believe freely, including moral and ethical beliefs

freedom of religion the right to practise any religion or none, without interference from the government

freedom of speech the right to express opinions publicly without government censorship, within legal limits

interest group an organisation that seeks to influence government policy on specific issues

laws the system of rules that Australia recognises as regulating the actions of its citizens, which it may enforce by the imposition of penalties and sanctions

lobby group a group that actively tries to persuade politicians to support their cause or policy

petition a formal request for change signed by many people

preferential voting a voting system where voters rank candidates in order of preference, used in Australian federal elections

proportional representation a voting system where seats in parliament are allocated based on the proportion of votes each party receives

right an entitlement to be treated in a particular way. A legal right is a right that can be enforced by law.

rule of law a legal principal that all citizens are subject to the law and equal before the law. The law applies equally to all citizens regardless of status or wealth

separation of powers the dividing of responsibilities and powers of government

3.6.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How can active and informed citizenship be achieved in Australia, and what is the process for forming a government?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

learn on

-  **Post-test** Online post-test
-  **eWorkbooks** Customisable worksheets for this topic
Reflection
-  **Digital document** Key terms glossary

3.6 Review exercise

Learning pathways

■ **LEVEL 1**
1, 4, 10, 11, 12

■ **LEVEL 2**
2, 3, 7, 13, 14

■ **LEVEL 3**
5, 6, 8, 9, 15, 16

REMEMBER AND UNDERSTAND

1. Identify what is meant by democracy.
 - A. Any form of government where laws protect the freedom of speech
 - B. Any form of government with rights protected by a constitution
 - C. Any form of government in which the people determine how they will be governed
 - D. Any form of government with two houses of parliament
2. From the following, identify a lawful form of dissent.
 - A. Protest
 - B. Writing a threatening letter
 - C. Overthrowing a government by force
 - D. A verbal threat or accusation

3. Explain what a protest might achieve.
 - A. A change in laws
 - B. A new law being passed
 - C. Raising public awareness
 - D. All of the above
4. Identify how old you must be to vote in Australia.
 - A. 20
 - B. 17
 - C. 18
 - D. 21
5. Outline the meaning of preferential voting.
 - A. Voters vote in preference from lowest to highest.
 - B. Voters number their votes from 1 to 10.
 - C. Voters vote in order of preference from highest to lowest.
 - D. Voters do not need to number their votes.
6. Identify how many votes must be numbered 'below the line' on a Senate voting slip.
 - A. Fewer than 12
 - B. 12
 - C. More than 12
 - D. At least 12
7. Explain the role of the opposition.
 - A. To create diversity
 - B. To argue with the government
 - C. To carefully examine, criticise and challenge the government in power
 - D. To generate conflict
8. Identify how many seats a majority government must hold.
 - A. Over 50 per cent
 - B. Fewer than 50 per cent
 - C. 80 per cent
 - D. 25 per cent
9. Identify which of the following is a key right associated with voting in Australia.
 - A. People have the right to vote in local council meetings.
 - B. One branch controls the other.
 - C. Each branch can check the powers of others.
 - D. All branches have the same role.
10. Identify the statement that best describes the role of freedom of assembly in Australia.
 - A. It allows anyone to assemble anywhere without limitations.
 - B. It allows peaceful protests but may be subject to legal restrictions.
 - C. It mandates government approval before any public assembly.
 - D. It restricts assemblies to private properties only.

ANALYSE AND APPLY

11. **Identify** when it might be reasonable for a government to restrict a protest gathering.
12. Briefly **explain** how each state and territory is represented in the Senate.
13. **Explain** how local members of parliament can assist individuals and community groups.
14. **Explain** the term *parliamentary majority*.

EVALUATE AND COMMUNICATE

15. **Explain** how the separation of powers in Australia's democracy ensures that no single group has too much control over decision-making.
16. **Explain** in what ways Australian citizens can actively participate in the democratic process beyond voting.

Answers and sample responses for this topic are available online.

4 Law and order

LESSON SEQUENCE

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LESSON 4.1 Overview

INQUIRY QUESTION

Where do our laws come from and why should they be obeyed?

What would happen if there were no laws? People would probably do as they pleased. There might be riots, crime and chaos, and it might not be safe to travel anywhere.

Laws are the legal rules that act as guidelines for behaviour. We have laws to protect us and to settle disputes. Additionally, laws give consequences to people who break them. But who actually makes these laws? How are laws made? Are there any differences in laws and how they are applied?

learn on

Pre-test

Online pre-test

eWorkbook

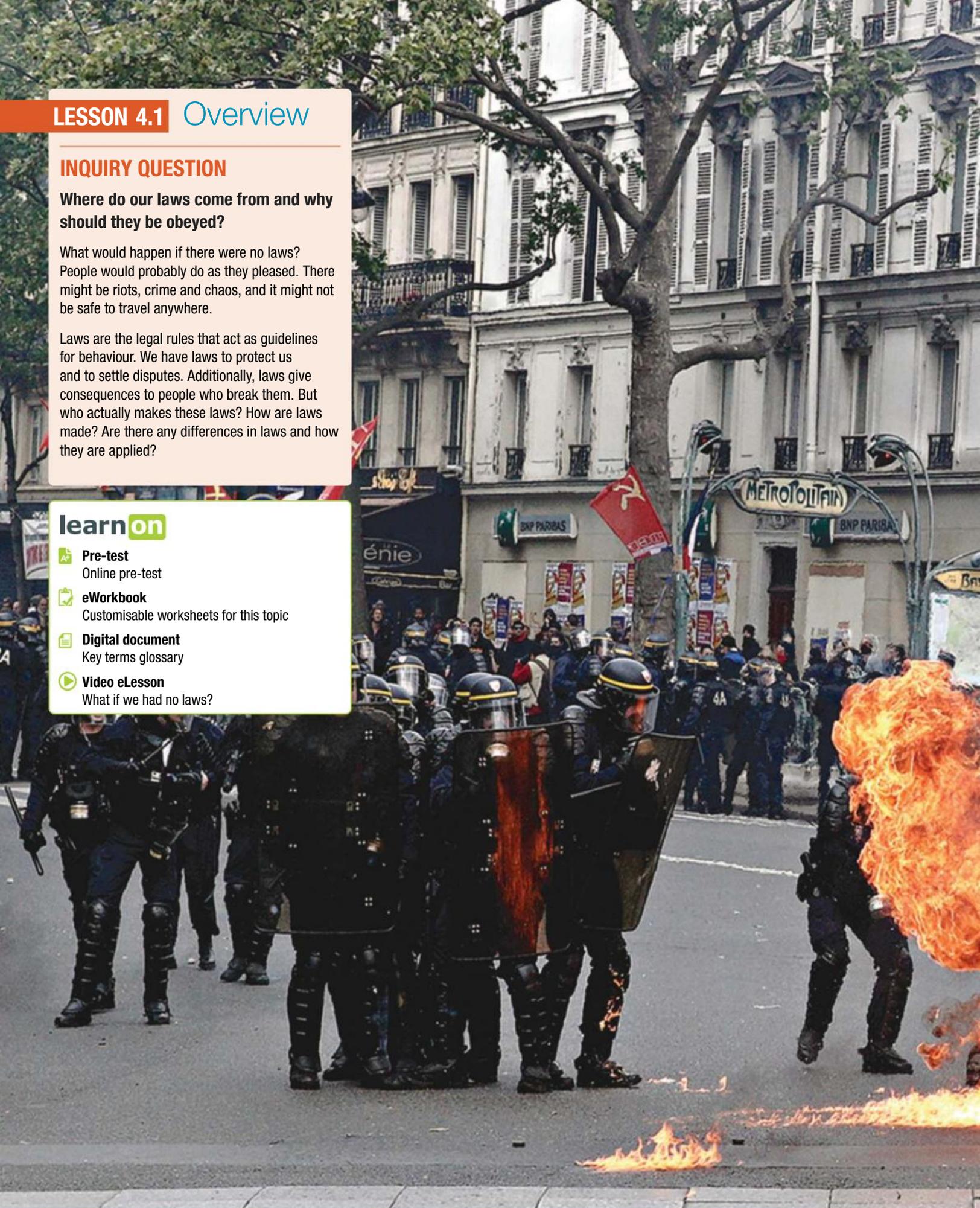
Customisable worksheets for this topic

Digital document

Key terms glossary

Video eLesson

What if we had no laws?



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING



LESSON 4.2 Statutes: Making laws through parliament

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how parliament makes laws.

Tune in

There are laws related to the protection of Australia's environment. They can be found in the *Environmental Protection and Biodiversity and Conservation Act 1999*.

1. Working with a partner, propose three reasons why we might need laws related to the protection of the environment.
2. Brainstorm reasons why laws might need to change.
3. Hypothesise: what might parliament do to change this law?

FIGURE 1 Australia's wildlife is protected under specific laws.



4.2.1 The lawmaking process

In Australia, parliaments consists of the lawmakers at the state and federal levels of government. Most laws in Australia are made by our federal and state parliaments. These laws are called **statute laws**. Most Australian parliaments have a lower house and an upper house. Parliaments make laws by passing a **Bill** through both houses.

Ideas for new laws come from members of parliament or government departments. Parliament also engages formal law-reform bodies to investigate and suggest ways to improve laws. Additionally laws change because society's actions highlight important issues (**FIGURE 1**).

A law made by parliament is called **legislation**, a statute or an **Act**. Before any proposed law can become an Act of Parliament, it has to be debated and passed by both houses of parliament and then approved by the **Crown**. During the debate in parliament, the government explains why the law is needed and why it will be good for Australia. The **opposition** may try to argue why this is not the case. Let us see, step by step, how all of this might happen in federal parliament (**FIGURE 2**).

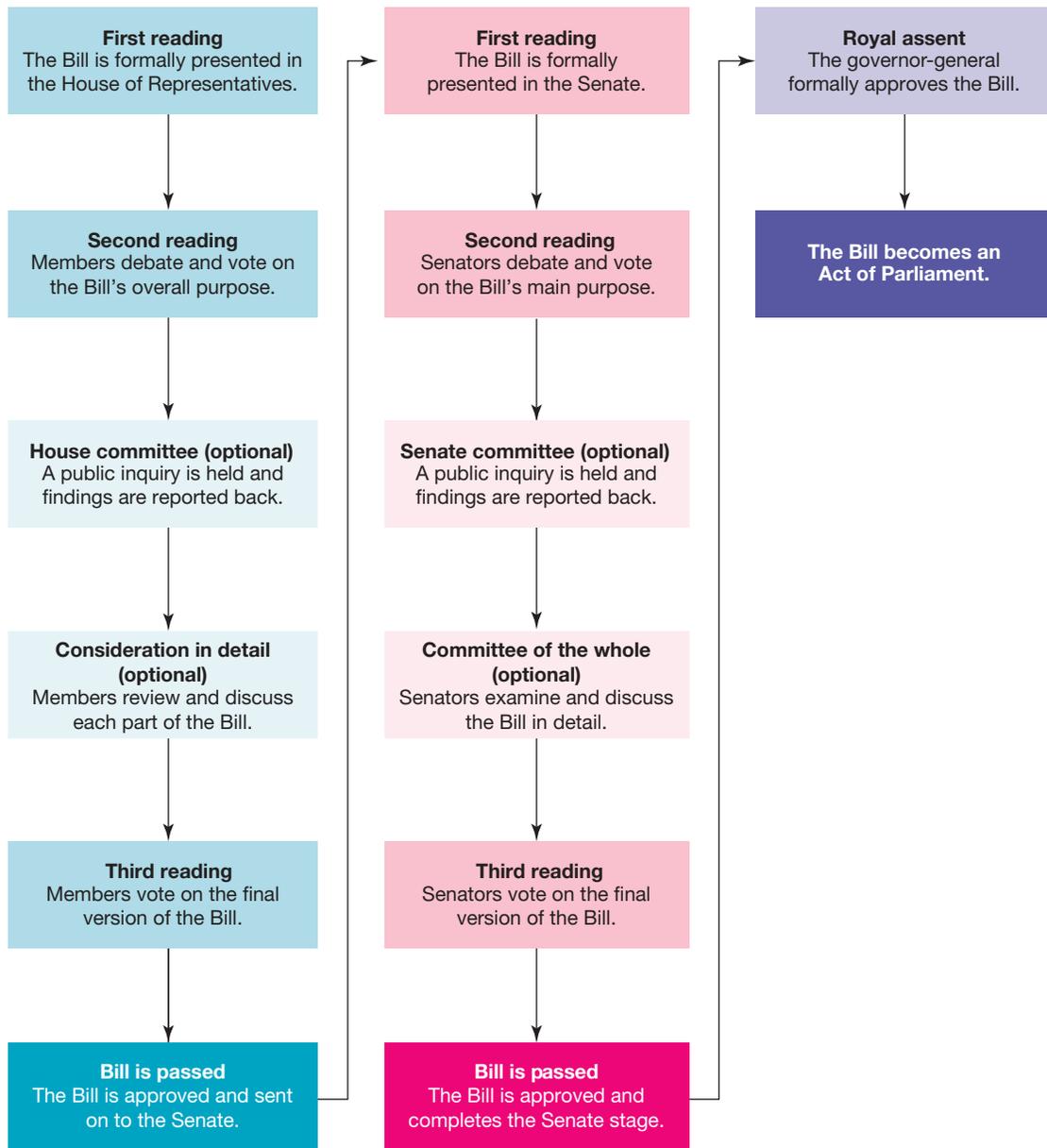
SkillBuilder discussion

Communicating and reflecting

1. Where do ideas for laws come from?
2. Why do you think most Australian parliaments have two houses?
3. Why might a proposed law be changed when it is being debated in parliament?



FIGURE 2 How laws are made in federal parliament



4.2 SkillBuilder activity ANALYSING

Working in pairs, visit the Commonwealth Parliament website to investigate a new law that is going through parliament now.

- Briefly **describe** the law you have found and explain what stage it has reached.
- Describe** what will happen in the next stage of the process of your Bill passing through parliament.
- Consider** whether this proposed law will be changed much on its way through parliament. **Justify** your opinion.
- Share your findings with another pair of students.

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 7

■ LEVEL 3

6, 8, 9

REMEMBER AND UNDERSTAND

- Identify the correct definition of statute laws.
 - Laws that are made by local government
 - Laws that are made by the judiciary
 - Laws that are made by state and federal parliaments
 - Rules that are made at school
- Select** from the following words to complete the sentence below.

petition bill slip
 Act of Parliament Act of law Act of government

A _____ is a proposed law and an _____ is the final version of the law.

- Royal approval / governor-general assent / royal assent / double majority** is approval by the ruling monarch of Australia or their representative of a proposed Bill.
- Explain** what is meant by the term *statute law*.

ANALYSE AND APPLY

- Use a flow chart to **explain** how a law is made in parliament. Draw your flow chart using eight boxes joined by arrows. Number each box from Step 1 to Step 8. In each box **describe** what happens to the proposed law in that step, using no more than ten words. For example: Step 1 — government (in Cabinet) discusses the idea of a new law.
- A new Bill about reducing plastic waste has just passed through both houses of the Australian Parliament.
 - Explain** what will happen next for the Bill to become an Act.
 - Why is royal assent an important part of the law-making process?

EVALUATE AND COMMUNICATE

- In your view, **explain** whether the process of lawmaking in Australia is fair. In your answer **consider** whether the people have enough opportunity to have their say when new laws are being made. **Justify** your answer.
- Since 1981, no party has had a majority in the Senate, except for three years from 2005 to 2008. This means that a government may have to negotiate with non-government senators to pass legislation. **Identify** one advantage and one disadvantage of this process.
- Queensland, the Northern Territory and the Australian Capital Territory only have one house of parliament, rather than an upper and a lower house. This means there is no upper house review of legislation. **Explain** whether this is a good or a bad thing. **Justify** your point of view.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** how the courts make laws
- **define** the term *precedent* and how it applies to lawmaking.

Tune in

Did you know? Courts often must decide the meaning of words in statutes when deciding cases.

The Victorian *Control of Weapons Act 1990* makes it an offence to carry a regulated weapon without a lawful reason.

Items that could be classed as a regulated weapon without someone realising it include everyday objects that, under certain regulations, are considered dangerous. For example, a hockey stick can be classed as a dangerous weapon if it is used to harm someone.

You be the judge:

1. **Create a list of items that you think could be classed as weapons.**
2. **Do you think someone should be convicted of the offence 'carrying a regulated weapon without a lawful excuse' if they have a hockey stick off the pitch? Justify your answer.**
3. **Suggest one reason a person might need to have a weapon.**

FIGURE 1 A game of hockey, played with a hockey stick

**4.3.1 Common law**

The main role of courts is to settle **disputes**, but courts also make laws. They do this as they interpret existing laws and make decisions to resolve the cases they are hearing. This type of law is known as case law, judge-made law or **common law**.

Common law originated in England as judges travelled from village to village making decisions based on tradition, custom and **precedent**. The judges began to apply a law that was common to all people across the country, rather than using the customary law of each region. Common law is applied today when cases come to court and there is no legislation regulating that case. The judge needs to make a decision about the law on this type of matter. This process is illustrated in the following case study, *Finders keepers*.

4.3.2 Finders keepers

The law relating to who has the right to own things that are found has changed over the years as judges have made new decisions. The judges in the following cases made decisions that became part of the common law because there was no existing law about possession that specifically applied to the cases.

CASE STUDY

Money found buried on private property

In 1964, a woman sold her New South Wales house to a couple. The couple hired a building company to work on the house. While digging, one of the owners of the building business found a tin with £8500 inside.

- The original owner claimed that she had buried the tin and therefore the money belonged to her.
- The couple who had bought the house claimed that the money was theirs because it was found on their land.
- The owner of the building business claimed the money belonged to him because he had found it.

No laws covered this dispute, so the judge hearing the case was required to make a decision that would create a new law. The judge decided that the couple who now owned the house were allowed to keep the money because they owned the land.

FIGURE 2 Who owns the contents of the box?



SkillBuilder discussion

Communicating and reflecting

1. Read the 'Money found buried on private property' case study. Work with a partner to decide how long you think the box has been buried.
2. Discuss why there is a dispute over the ownership of the box.
3. You be the judge: who will you give the box to? Give a reason for your decision.

CASE STUDY

Gold found by the side of the road

In 1965, a Queensland police officer was walking to the place where he was going to direct traffic leaving a drive-in theatre. On the side of the road, on land belonging to the theatre, he found a gold ingot. The owner of the gold could not be found.

- The owner of the land claimed ownership.
- The police officer claimed ownership because he had found the ingot.
- The police officer's employer (the state) claimed ownership because the officer worked for the state.

The judge hearing the case decided that the land was regularly accessed by the public and that the police officer could keep the gold ingot because his job was to direct traffic, not to find lost things. Any other member of the public might have found the ingot, and the fact that the officer was on duty was just a coincidence.

FIGURE 3 Does a gold ingot found on someone's property belong to the property owner or to the person who found it?



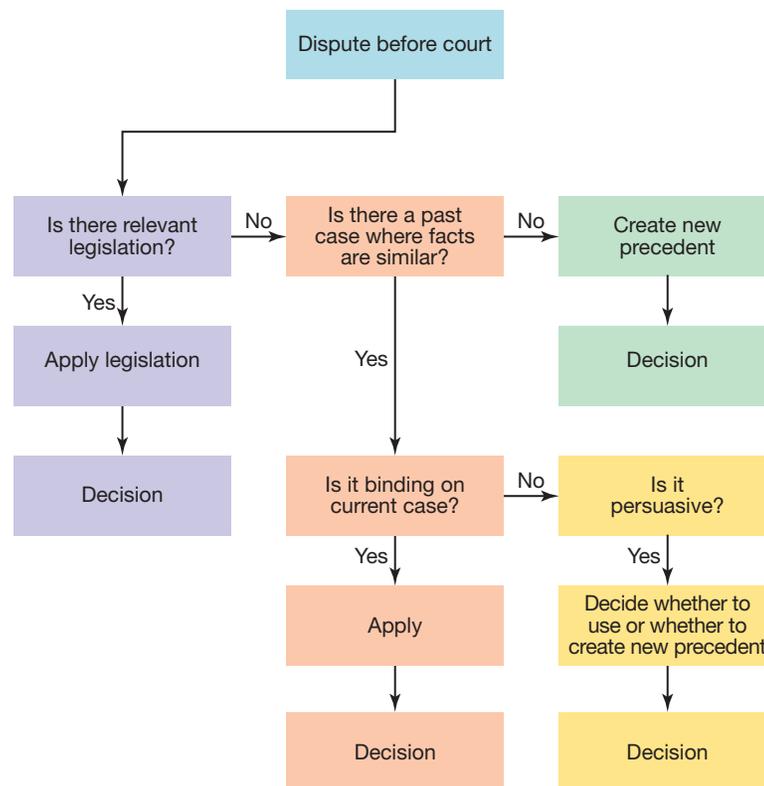
4.3.3 Precedent

Common law is developed through the legal principle of precedent. If your sister was given a car for her 18th birthday, you might expect your parents to do the same for you because your parents have set a precedent. Courts use the same idea. When a judge makes a decision in a court case, this decision will be recorded in a law report. Other judges hearing cases with similar facts will refer to these decisions. As judges follow precedents set in earlier cases, the law is applied consistently and fairly. Additionally, it might be possible to predict the outcome of a case. This process, which is used by courts to interpret statutes and create precedents, is shown in **FIGURE 4**.

Precedent works because of our court hierarchy.



FIGURE 4 The decision-making process for settling disputes in court

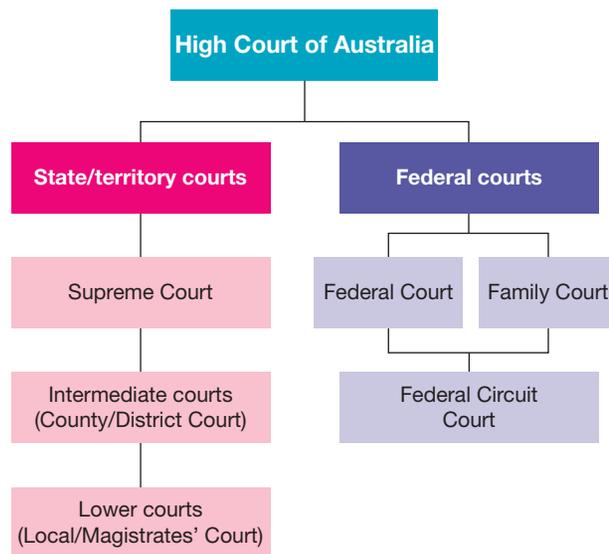


4.3.4 Australia's court hierarchy

Australia's court system is made up of many different courts, which are arranged in levels in order of importance (a hierarchy). The higher courts in the hierarchy hear the most serious matters; less serious cases are heard in the lower courts.

At the bottom of the court hierarchy is the Magistrates' Court (called the Local Court in New South Wales, the Magistrates' Court in Western Australia and elsewhere). These courts hear more than 90 per cent of the cases that go to court, and they have a large number of courthouses. There is probably one in your local area. The District Court (called the County Court in Victoria) exists in most states and sits only in the main cities. There is only one Supreme Court in the capital city of each state, and only one High Court in Australia (in Canberra).

FIGURE 5 The Australian court system



Did you know?

Western Australia is the only state in Australia with its own Family Court. While other states rely on the federal family law system, the Family Court of Western Australia handles both state and federal family law matters, like divorce, child custody, and property settlements, all in one place. This unique court was established in 1976 to better serve WA families under a single, streamlined system.

The High Court is a federal court, but its decisions are binding on all state and territory courts. When superior courts (such as the High Court and each state's Supreme Court) settle disputes, they can create new legal principles that must be followed by the lower courts in their own hierarchy. This is referred to as a **binding precedent**. Judges in each state have to follow only those decisions made in the higher courts in their state, and those made in the High Court. For example, a decision made by a judge in the Supreme Court of Western Australia does not have to be followed by judges in the District Court of New South Wales. However, the New South Wales judges could use the decision as a **persuasive precedent**.

4.3 SkillBuilder activity QUESTIONING AND RESEARCHING

1. Using the internet or newspapers, find an article that reports on a new principle of law that has been made through a landmark court case.
2. **Investigate** how this case proceeded through the courts.
3. Write a brief report on how this case established a new legal principle.
If you are having difficulty finding a case, try one of these:
 - *Commonwealth v Tasmania* (Tasmanian Dams case)
 - *Eddie Mabo & Ors v The State of Queensland* (Mabo case)
 - *Dietrich v the Queen* (Dietrich's case)
 - *Plaintiff M701/2011 v Minister for Immigration and Citizenship* (Malaysian solution case)
 - *Love v the Commonwealth of Australia; Thoms v the Commonwealth of Australia*
 - *Vanderstock & Anor v The State of Victoria*

Learning pathways

■ LEVEL 1

1, 2, 3, 7

■ LEVEL 2

4, 5, 6

■ LEVEL 3

8, 9

REMEMBER AND UNDERSTAND

1. Identify the statement that best explains *common law*.
 - A. Laws that are made by state and federal parliaments
 - B. Laws that are made by the courts
 - C. Laws that are made by local government
 - D. Rules that are made at school
2. Identify the statement that best describes *precedent*.
 - A. Laws that are made by local government
 - B. A previous court decision that has a high degree of similarity to a case that is currently before the court
 - C. Any decision that is heard in the Supreme Court
 - D. Any decision that is made in the Magistrates' Court
3. Identify three statements that are relevant to the case studies under the heading of Finders keepers.
 - A. All cases concern lost items (of significant value).
 - B. All cases have items that were never claimed.
 - C. All cases involve common law.
 - D. All cases involve ownership disputes.
4. **List** the courts in Western Australia's court hierarchy, from highest to lowest.
5. **Explain** where and how common law first developed.

ANALYSE AND APPLY

6. **Summarise** how the judges in the case study Finders keepers made changes to the law.
7. **Identify** two things that could happen if a judge decided to ignore a precedent and make a completely new decision.
 - A. The judge could be fined.
 - B. A new precedent could be set.
 - C. The decision would be overruled.
 - D. An appeal to a higher court may be made.
 - E. An appeal to a lower court may be made.

EVALUATE AND COMMUNICATE

8. Many people argue that judges should not make law because they are not democratically elected, unlike members of parliament. **Identify** and **explain** one positive and one negative effect of judges making law through precedent.
9. The doctrine of precedent states that judges must apply a precedent established in a higher court in the same court hierarchy, but occasionally judges apply a precedent from a court in a different state or different country. **Explain** when and why this might occur.

Answers and sample responses for this topic are available online.

LESSON 4.4 Types of law: Criminal and civil law

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** what makes a crime according to criminal law
- **explain** the difference between a summary and indictable offence
- **explain** how civil law encompasses other areas of law.

Tune in

1. Draw a table such as the one below.

Criminal law	Civil law

- In the first column, mind-map a list of everything you know about criminal law.
- In the second column, mind-map a list of everything you know about civil law.
- Which list is longer?

2. How do you think criminal and civil law might be involved in the car accident shown in FIGURE 1?

FIGURE 1 Did you know that a car accident can involve both criminal and civil law?



4.4.1 Criminal and civil law

There are two main types of law in Australia:

- Criminal law, which protects us and punishes offenders
- Civil law, which protects our rights and property

Criminal law is made and enforced by parliament and the courts. Everybody must follow the same criminal laws. Civil law, on the other hand, enables individuals and groups to pursue their rights if they have been infringed by other individuals and groups.

4.4.2 Criminal law

Criminal law protects innocent individuals from wrongdoers. It outlines the way people should act — what they can and cannot do. Examples of crimes include robbery, **homicide** (**manslaughter** and murder), rape, assault, theft and drug offences.

If a person commits a crime, this is treated very differently from other legal issues. For example, if you rob a bank, it does not remain a dispute between the bank and yourself. Your action is regarded as an offence against the state. The state gives the police the power to catch offenders and **prosecute** them through the courts. It is up to the **prosecution** to take legal action against an accused person in order to establish the guilt of the accused, based on evidence, because the prosecution has the **burden of proof**. This means that the prosecution must prove that the accused is guilty of the crime. It is not up to the accused person to prove their innocence. This is referred to as the **presumption of innocence**.

During the court case, you, as the accused, will have the opportunity to tell your side of the story. If you are found guilty, you will be punished. Possible punishments include a fine, imprisonment, community service, good behaviour bonds, loss of a driving licence or a combination of these punishments.

Indictable offences

Serious crimes, such as homicide, child abuse and rape, are called **indictable offences**. These offences are heard in higher courts, such as the District or County Court, or the Supreme Court. The guilt of the **accused** is determined by a **jury**.

Summary offences

Less serious crimes, such as minor assaults, petty theft and traffic infringements, are called **summary offences**. These are dealt with relatively quickly and cheaply by a **magistrate** in a Magistrates' Court.

Did you know?

Western Australia has 'either way' offences; they can be dealt with as a summary or an indictable offence, depending on the circumstances of the offence. The penalty is significantly lower if the offence is heard summarily.

In the car accident shown in **FIGURE 1**, the state would take action if the driver who caused the accident had broken the road laws, by speeding, failing to give way or having a blood alcohol content of over 0.05 per cent.

SkillBuilder discussion

Communicating and reflecting

1. Why is a crime considered an offence against the state?
2. What is the difference between a summary and an indictable offence?
3. What is meant by the term *beyond reasonable doubt*?

FIGURE 2 A criminal act is treated as an offence against the state, which uses the police and courts to apprehend, prosecute and imprison the person who has done wrong.



Burden and standard of proof

In a criminal case, the jury (or magistrate) must be satisfied that the accused is guilty '**beyond reasonable doubt**'. This means that, based on the evidence, the only logical conclusion is that the accused is guilty. This is known as the **standard of proof**. The prosecution has the burden of proof. If a magistrate or jury is not convinced beyond reasonable doubt of the accused's guilt, the accused should be given the benefit of the doubt and found not guilty.

4.4.3 Civil law

Civil law deals with non-criminal matters. It allows people to bring actions against other people for a civil wrong done to them. Civil law involves such matters as disputes between friends, business partners, consumers and retailers, neighbours, or an individual and a government department. Examples of civil wrongs include **negligence**, **trespass**, **defamation**, **nuisance** and **breach of contract**. Where a civil wrong is successfully proven in court, the wronged party, referred to as the **plaintiff**, will usually seek damages (money) as compensation. In such a case, the **defendant** will be found to have been **liable**.

For example, consider the landmark court case of *Donoghue v Stevenson* from 1932. In this case, Mrs Donoghue discovered a decomposed snail at the bottom of a ginger beer bottle after she had consumed some of its contents.

This caused her to suffer serious stomach illness. She decided to sue the manufacturer, Mr Stevenson, for negligence, arguing that he did not take sufficient care to ensure the product was safe for consumption.

Mrs Donoghue, as the plaintiff, went to court to prove her case (see **FIGURE 3**). She sought an order from the judge for the manufacturer, the defendant, to pay her compensation for the harm caused. The plaintiff does not always win such cases; sometimes the judge decides that the plaintiff's rights were not breached and can order them to pay the defendant's legal costs. Civil law can be required to address a wide range of unusual circumstances.

SkillBuilder discussion

Analysing

1. Why is the situation shown in **FIGURE 3** an example of civil law?
2. What is the standard of proof in a civil case?
3. Why do you think the standard of proof is different between criminal and civil cases?

FIGURE 3 A civil wrong is treated as a private matter between the disputing parties. If the defendant is found liable, the judge may order them to compensate the plaintiff or rectify the harm caused.



There is a lower standard of proof in civil cases. The plaintiff has to show that the defendant was 'more likely than not' to have committed the breach. This is known as the '**balance of probabilities**'.

In the car accident shown in **FIGURE 1**, the driver who caused the accident can be sued for medical expenses related to injuries suffered by others and the damage caused to property.

4.4 SkillBuilder activity QUESTIONING AND RESEARCHING

You may use digital or print media for this task — read all the instructions before you begin.

1. In pairs, find three newspaper articles describing civil law cases and three describing criminal law cases. Make sure your articles relate to Australian law and are not more than 12 months old.
2. **Option 1:** Cut out (or print) the heading for each article and paste them on a large sheet of paper (leave room for annotations). Record where the newspaper the article is from and the date of the article. **Classify** each article as relating to criminal or civil law and provide evidence from each article to support your decision.
3. Write a paragraph to **summarise** (present the main points) each article under each heading.
4. **Identify** the laws that apply to each article.
5. **Option 2:** Create a slide for each article. Insert a screenshot or copy and paste the heading of the article. Add text boxes for:
 - newspaper name and date
 - classification (civil/criminal)
 - evidence supporting classification
 - summary paragraph
 - applicable laws.

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 7, 8

■ LEVEL 3

6, 9, 10

REMEMBER AND UNDERSTAND

- Fill in the gaps in the following sentence to **define** criminal and civil law.
_____ protects our rights and property while _____ protects people and punishes offenders.
- Classify** the following as either a crime or a civil wrong.

A. Negligence	B. Robbery
C. Drug offences	D. Trespass
E. Arson	F. Breach of contract
G. Homicide	H. Trespass
I. Defamation	
- True or false? Summary offences can only be dealt with by the Supreme Court.
- State** the difference between:
 - the plaintiff and the defendant
 - indictable offences and summary offences
 - burden of proof and standard of proof.
- Explain** what is meant by the presumption of innocence.
 - Explain** how the presumption of innocence protects individuals who are accused of a crime.

ANALYSE AND APPLY

- The standard of proof differs in criminal and civil cases.
 - Explain** the difference between civil and criminal law.
 - Identify** which type of case has the higher standard of proof.
 - Distinguish** between the standard of proof required in civil and criminal cases.
 - Suggest** reasons why the standard of proof differs in criminal and civil cases.
- Identify** whether the following cases involve criminal law, civil law or both.
 - You are held up at knifepoint and your purse or wallet is stolen.
 - A woman slips on a wet supermarket floor and breaks an ankle.
 - A man is convicted of driving with a blood alcohol content of 0.08 per cent.
 - You find maggots in a tuna sandwich you just bought from a cafe.
 - A neighbour's loud music at 3 am is disturbing you.

EVALUATE AND COMMUNICATE

- Demonstrate** your understanding of how a case can include both criminal and civil elements. **Create** your own scenario for a case that might involve both criminal and civil law. **Identify** the part of your scenario that is civil and the part of your scenario that is criminal.
- In a civil case, the victim can sue for compensation, but in criminal cases, the wrongdoer is punished and the victim is frequently not compensated for harm done to them. Limited victim compensation is available in some cases but not in every case.

It has been suggested that the law should be changed to provide compensation in every criminal case.

Explain one advantage of this change and **predict** a possible disadvantage of this change.

- Criminal cases are dealt with by the courts because the state prosecutes the wrongdoer. Only around 20 per cent of civil cases come before the courts because they are resolved out of court by negotiation between the parties, or because one party does not have the money to fight the case. This can mean that the wealthiest or most powerful party wins.

Propose a reform to the law that could help resolve this situation.

Answers and sample responses for this topic are available online.

Customary law in Aboriginal and Torres Strait Islander communities

Aboriginal and Torres Strait Islander readers are advised that this topic may contain photos of, or references to, people who have died.

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** some of the ways in which customary laws are significant to Aboriginal and Torres Strait Islander cultures
- **outline** examples of how customary law is practised within the legal system today.

Tune in

Aboriginal and Torres Strait Islander Peoples recognise 'payback' as an element of customary law. Traditional punishments include spearing and singeing a person.

Though the man in **FIGURE 1** is just giving a demonstration, imagine that he is about to deliver 'payback'.

1. As a class, discuss what you think happens during a spearing.
2. Brainstorm ideas about what is meant by *spearing* and *singeing* a person.
3. Discuss whether you think this sounds like a suitable way to deliver justice.

FIGURE 1 Spearing is a possible punishment within customary law.



4.5.1 What is customary law?

Customary law refers to the guidelines for behaviour that have been developed by Aboriginal and Torres Strait Islander Peoples. These laws are passed on by word of mouth and have not been written down. In what way is customary law significant to Aboriginal and Torres Strait Islander Peoples? We will explore the answer to this question throughout the rest of this lesson.

The Dreaming

Aboriginal and Torres Strait Islander Peoples' laws originated in the Dreaming. The Dreaming is an English term that refers to the origins and practice of Aboriginal and Torres Strait Islander beliefs and cultural systems. These communities have a very strong relationship with the land. They believe that they do not own the land — that the land is a spiritual part of them, and that there can be no separation of one from the other. The stories, songs and dances about the Dreaming reveal the many ways in which Aboriginal and Torres Strait Islander Australians are connected to the land.

Dreaming stories

Dreaming stories are used by Elders to pass on customary laws and provide guidance and instructions about how to behave and the right way to live. Young people are expected to listen to their elders, be obedient, not be greedy or steal. Customary law covers food, family rules, marriage requirements and spiritual responsibilities. Songs and dances are used to pass down customary law.

FIGURE 2 Fern Pool, Karijini National Park, on the traditional lands of the Banyjima, Kurrama and Innawonga people. Aboriginal and Torres Strait Islander Australians believe that the Australian landscape and all its features were created by their ancestors.



SkillBuilder discussion

Communicating and reflecting

1. Look at **FIGURE 2**. How do Aboriginal and Torres Strait Islander Peoples believe Fern Pool was created?
2. How would creation information be passed from generation to generation?
3. Do you think these stories have been passed unchanged from generation to generation? Give reasons for your answer.

Dispute resolution

It is true that Aboriginal and Torres Strait Islander Peoples did not have governments, police or courts in the same form as contemporary Western systems. However, this does not mean they lacked law, governance, social order or systems of justice.

Rather, the Elders would meet to discuss the incident or dispute and agree on an appropriate consequence or solution. Punishments ranged from public ridicule or shaming for minor offences to exile or spearing for serious cases. The Warlpiri people of Central Australia would spear the offender's thigh, leaving a scar as a reminder of their wrongful act.

4.5.2 Recording customary law

Customary law has not been **codified**. It is not easy to record. This is because it is not always the same throughout Australia. Different language groups and communities have their own customary laws, languages, beliefs and traditions. The laws that apply to one group do not necessarily apply to another group.

4.5.3 Customary laws and Australian law

Some state and territory laws have been amended to specifically refer to customary law — the Northern Territory's *Sentencing Act 1995* recognises customary law. Many courts have also taken customary law into account when considering sentences. Refer to the case study Court imposes customary punishment in section 4.5.3 for an example.

CASE STUDY

Court imposes customary punishment

In 1993, Wilson Jagamara Walker became the first in Australia to receive a customary punishment as part of a sentence. Walker, a 23-year-old Aboriginal man from Central Australia, pleaded guilty to manslaughter after intervening in an attack and killing one of the attackers. Chief Justice Martin initially sentenced him to three years of imprisonment, but the sentence was suspended. Walker was released on a two-year good behaviour bond with the condition that he be speared in the thigh by the victim's relatives.

In describing the customary punishment, Chief Justice Martin said:

'When you return to Yuendumu, you will be called upon to face tribal punishment ... by getting speared in each of your legs a couple of times in such a way that you will be pained for at least a couple of weeks ... A hunting spear would be used. The punishment would be administered by the brother of the dead man.'

Martin ordered police officers to witness the spearing so that they could verify that the sentence had been carried out. Walker was told to return to the court to have the sentence reviewed if this did not occur.

FIGURE 3 Wilson Jagamara Walker's case was the first in Australia to include a customary punishment as part of a sentence.

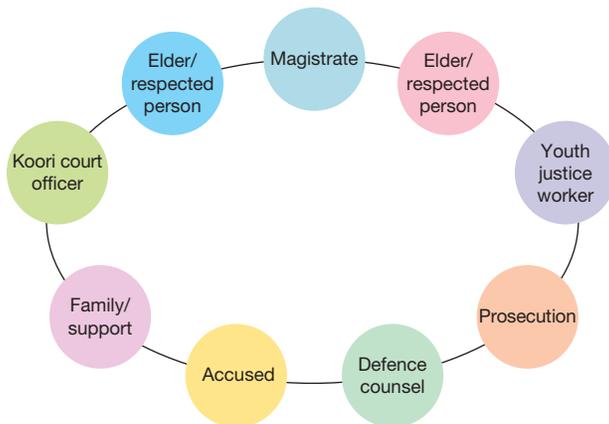


SkillBuilder discussion

Communicating and reflecting

1. What is spearing?
2. Why do you think customary law uses this type of punishment rather than fines or imprisonment?
3. Suggest a reason why customary law is now being used alongside Australian law

FIGURE 4 The Koori Court in Victoria provides a more informal environment for Aboriginal and Torres Strait Islander offenders, who must plead guilty if they wish to be sentenced here.



SkillBuilder discussion

Analysing and Evaluating

1. Look at **FIGURE 4**. What is the Koori Court?
2. Discuss how it differs from traditional courts.
3. Decide, with a partner, why this type of court might be needed.

4.5.4 Alternative sentencing for Aboriginal and Torres Strait Islander offenders

Aboriginal and Torres Strait Islander offenders who plead guilty early may be offered alternatives to court-imposed sentences. One initiative is circle sentencing, which is widely used in New South Wales. This includes Elders, the victim, the offender, their lawyer, the prosecutor and a magistrate sitting together to determine an appropriate sentence. This process aims to avoid imprisonment and is not used for serious charges like murder or sexual assault.

In circle sentencing, the offence is considered first; then, the offender's background and the effect on the victim and the community are discussed. Elders decide the sentence, which must be approved by the magistrate. Sentences often include good behaviour bonds, with conditions such as counselling or community service that involves culturally appropriate supervision. The aim is to break the cycle of offending.

Other states have similar programs:

- Victoria: Koori Courts
- South Australia: Nunga Courts

In Western Australia, Aboriginal Community Courts ran between 2006 and 2015 but do not operate anymore. The territories also have circle or community courts. These courts involve Aboriginal and Torres Strait Islander community members and are less formal than traditional courtrooms.

Did you know?

Customary law is not formally recognised in Western Australia, but courts may consider cultural background and customary practices in sentencing and child protection cases.

Positive outcomes for Aboriginal and Torres Strait Islander offenders

According to the 2021 census, Aboriginal and Torres Strait Islander Peoples make up 3.8 per cent of the Australian population but account for 32 per cent of the prison population. In Western Australia, Aboriginal

and Torres Strait Islander Peoples are 17 times more likely to be imprisoned than non-Indigenous Australians. This over-representation is linked to **intergenerational trauma** due to colonisation, unequal social positions and cultural differences.

Circle sentencing has been effective in lowering reoffending and imprisonment rates when compared to sentencing through traditional courts. This is because the underlying causes of offending, such as drug and alcohol addiction, are addressed. The inclusion of Elders and respected community members and consideration of cultural factors improve engagement levels.

One criticism of this approach to sentencing is that the accused is required to plead guilty. This undermines the presumption of innocence, where the prosecution is required to establish the guilt of the defendant.

4.5 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 7, 9

■ LEVEL 3

6, 8, 10

REMEMBER AND UNDERSTAND

1. Customary law refers to the guidelines for behaviour that were developed by **British courts / Aboriginal and Torres Strait Islander Peoples / Australian courts**.
2. Identify how Elders are involved in the administration of justice in cases involving young Aboriginal and Torres Strait Islander offenders in Victoria.
 - A. They are never involved.
 - B. They act as lawyers for the offender.
 - C. They keep the offender in their custody until sentencing.
 - D. They participate in determining the punishment handed down to the offender.
3. Identify an example of legislation that recognises customary law in Australia.
 - A. The Northern Territory Sentencing Act
 - B. The Constitution of Australia Act
 - C. The Racial Discrimination Act
 - D. The Sex Discrimination Act
4. **Explain** why it is difficult to codify customary law.
5. **Summarise** why many politicians and lawmakers in the early years of colonisation and federation did not understand that Aboriginal and Torres Strait Islander Peoples had incredibly detailed customary laws that governed their societies.

ANALYSE AND APPLY

6. Read the case study Court imposes customary punishment. **Outline** the way in which the judge incorporated customary law into the sentence imposed on Mr Walker.
7. **Identify** two reasons for recognising customary law as part of Australia's legal system.

EVALUATE AND COMMUNICATE

8. **Consider** whether new courts should be established to reflect the traditional laws of other ethnic or religious groups in Australia. For example, **consider** whether an Islamic court should be established so that Muslim offenders could be sentenced according to sharia law.
State one argument for or against this idea.
9. **Recall** as many reasons as you can to **explain** why Aboriginal and Torres Strait Islander Peoples find customary laws significant.
10. If there is a conflict between Aboriginal and Torres Strait Islander Peoples' law and laws legislated by parliament, **explain** which should apply. **Justify** your point of view.

Answers and sample responses for this topic are available online.

LESSON 4.6 Young people and the law

LEARNING INTENTION

By the end of this lesson you should be able to **identify** young people's rights and responsibilities when interacting with law enforcement.

TUNE IN

In Western Australia, the age of criminal responsibility is 10. This means that children under the age of 10 cannot be charged with a criminal offence. However, between the ages of 10 and 14, the prosecution must prove that the accused understand their actions were seriously wrong, rather than just naughty or mischievous or a bit of harmless fun. Above the age of 14, children are fully liable for criminal offences.

1. **Why do you think the minimum age at which a child can be charged with a crime is 10?**
2. **Do you think this minimum age should be raised? Give reasons for your answer.**
3. **What challenges do you think courts might face when dealing with youth offenders?**
4. **Should youth offenders be treated differently to adults in the justice system? Give reasons for your answer.**

FIGURE 1 There have been discussions about raising the age of criminal responsibility in Western Australia.



4.6.1 Why is the legal system important?

The law plays an important role in the lives of young people under 25, shaping their rights and responsibilities in areas like work, social media and interactions with police. In Western Australia, the age of criminal responsibility is 10, meaning children under this age cannot be charged. The Western Australian justice system focuses on diversion and rehabilitation programs for young offenders. The aim is to address the root causes of offending and reduce repeat offences by helping young offenders make better life decisions.

Understanding legal consequences — especially in areas like cyberbullying, substance use and public behaviour — helps young people make informed choices and avoid trouble. Knowing your legal rights can also protect you in situations involving employment, consumer protections or police interactions. In this lesson the focus will be on under-25s interacting with the police.

4.6.2 When do I have to give my details to the police?

In some circumstances, you may be committing a criminal offence if you refuse to give police your name and address and show your ID (if you have one) when requested by police. A police officer can ask for these details if they reasonably believe that:

- you have committed an offence, including traffic offences
- you may have information that will assist in their investigation
- you are driving a car or riding a motorbike
- you have been involved in a traffic incident or may have information about a traffic incident
- you are in a licensed venue, or have purchased alcohol using a fake ID

FIGURE 2 Police can legally ask for your name, address and ID. They must provide you with their name, rank and place of duty if you request this information — write it down for future reference.



It is also a criminal offence to provide false information — such as a fake name and address or using fake ID.

It is best to always cooperate when the police request this type of information. You have the right to ask a police officer for their name, rank and place of duty.

4.6.3 Police questioning and juvenile rights in Western Australia

When the police arrest and charge a **juvenile** with a criminal offence, they must notify a **responsible adult** by phone or in person. If a responsible adult is not available, police must find an independent witness to be present, unless it is considered inappropriate to do so. This might be the case if:

- the young person was driving a vehicle
- the young person refuses to provide their details
- notifying a responsible adult could interfere with an investigation or pose a risk to the young person's safety.

In Western Australia there is no law requiring a responsible adult to be present during police questioning, but police guidelines recommend it. If a responsible adult is not present, questioning may proceed, but any statements made could later be challenged in court.

Who can act as an independent witness?

An independent witness may be present during police questioning, and may include:

- a parent, guardian or youth worker
- an older sibling or relative or other trusted adult
- a lawyer of the young person's choosing.

Where possible a witness should be of the same gender, ethnicity and cultural background of the young person.

The right to silence

The right to silence is a fundamental legal principle that allows individuals to refuse to answer police questions except in certain circumstances (see section 4.6.2). You do not have to go to an interview or go to a police station unless you are under arrest.

If you are arrested, you have the right to be told why you are under arrest. Police should also inform you of your right to call a friend or family member and a lawyer, and to have an independent person present during questioning.

Other than giving your name and address and date of birth, you can choose not to answer any questions.

Police must caution you that:

- you do not have to say anything unless you wish to
- anything you do say may be used as evidence in court.

If questioned, you can lawfully respond with 'no comment'.

The presumption of innocence

Under Australian law, every individual is presumed innocent until proven guilty. This means a person does not have to prove their innocence; rather, the prosecution must provide the evidence to establish guilt. Remaining silent cannot be used as proof of guilt.

4.6.4 Following lawful directions: move-on laws

Police have the power to issue move-on orders, which require a person — including juveniles — to leave an area for up to 24 hours. These orders are meant to prevent crime, keep public areas safe and reduce disruptions.

A move-on order can be given if the police suspect someone is:

- committing or about to commit an offence
- breaching the peace
- behaving in a disorderly manner.

Ignoring or breaching a move-on order is an offence and could lead to arrest and charges being laid.

FIGURE 3 A police officer can issue a move-on order to a young person in a public place.



SkillBuilder discussion

Analysing

1. Why do you think it is important for the law to presume that someone is innocent until proven guilty?
2. How do you think move-on orders can help keep public areas safe and prevent disruptions?

For young people under 18, police can also step in if they believe their wellbeing is at risk or they are somewhere they shouldn't be, such as skipping school. In these cases, officers may take them to a safe place, like a youth shelter or into the care of a responsible adult. However, police cannot hold a young person in a lock-up while waiting for care arrangements to be made — they must ensure a suitable alternative.

Did you know?

Police can search a young person, their home or belongings if they reasonably suspect they have something relevant to an offence such as a weapon, drugs, stolen goods or graffiti tools.

Police can also confiscate alcohol and cigarettes from young people under 18, as it is illegal for minors to possess or consume alcohol in a public place or purchase tobacco products.

4.6 SkillBuilder activity COMMUNICATING AND REFLECTING

There are many laws related to young people and the law and there are variations in these laws in the states and territories of Australia.

The majority of people obtain their learner's permit to drive a car before they finish their secondary education. Some will move on to their P licence before they finish school. The laws related to L and P licences vary around Australia. If you are travelling interstate you are expected to know and obey the relevant laws.

1. Conduct some research about the legal requirements related to driving in each of the states and territories.
2. Create a presentation designed to educate your peers on the different rules and regulations.

Learning Pathway

■ LEVEL 1

1, 2, 5

■ LEVEL 2

3, 4, 7, 8

■ LEVEL 3

6, 9, 10

REMEMBER AND UNDERSTAND

1. The age of criminal responsibility in Western Australia is:
 - a. 10
 - b. 12
 - c. 14
 - d. 16
2. A juvenile is defined as a person who is under the age of:
 - a. 15
 - b. 18
 - c. 21
 - d. 25
3. True or false? Young people are not obligated to give their name and address to the police unless they have been arrested.
4. Before the police can question you, they are required to give you an official caution. **Identify** the two pieces of information you must be given.
5. True or false? Move-on orders can only be given to adults.

ANALYSE AND APPLY

6. A juvenile charged with a criminal offence is entitled to have a responsible adult present during police questioning.
 - a. **Explain** what is meant by the term *responsible person*.
 - b. **Explain** why statements made without a responsible person present can be challenged in court.
7. Emma was in a public park at 10:00 am on a school day and was issued a move-on notice by the police. She was sitting on a bench seat at the time and does not understand why the order was issued or what it means. **Explain** to Emma why the order may have been issued and what it means.
8. **Distinguish** between a responsible person and an independent witness.
9. Answer the following questions in relation to juvenile offenders.
 - a. **Suggest** why a police officer cannot perform the role of independent witness when a young person is questioned by the police.
 - b. Where possible, an independent witness should be of the same gender, ethnicity and cultural background of the person being questioned by the police. **Suggest** a reason why.

EVALUATE AND COMMUNICATE

10. The right to silence and presumption of innocence are fundamental legal principles in Australia. **Explain** what is meant by the presumption of innocence and how it is supported by the right to silence.

Answers and sample responses for this topic are available online.

LESSON 4.7

Inquiry: Western Australian court case investigation

LEARNING INTENTION

By the end of this lesson you should be able to:

- **investigate** a recent criminal case in Western Australia
- **develop** your legal vocabulary
- break down and identify the various aspects of a criminal case.

Background

In this inquiry you will investigate a recent criminal case in Western Australia.

The Western Australian judicial system was established in 1829, shortly after the settlement of the colony. The system originally consisted of a sole decision-maker Captain James Stirling, enforcing British law because Australia did not have its own law at this time.

Nearly 200 years later, the system has grown to a hierarchy of seven courts that operate at more than 32 locations across the state. Courts operate in a hierarchical system, meaning that courts must follow the decisions of higher courts in the hierarchy. This ensures consistency in the application of the law across Western Australia.

FIGURE 1 The Supreme Court of Western Australia



Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

You will need to locate a recent criminal case that you can track from start to finish. You might use newspaper reports or online court records. Make sure you can answer the following questions about your case:

- What are the different courts in the Western Australian Court hierarchy and what cases do they hear?
- How can legal terminology be used to identify a criminal case?
- Which statutes contain offences?
- Where are different types of offences heard?
- What are the elements and penalties for different offences?
- What was the result of my criminal case?

Read the **Perth man fined for using metal jawed traps on magpies** article in the Resources panel. Read this article and see the annotations below.

<p>Terminology Fined, plead, guilty, animal cruelty, sentenced, Magistrates' Court, criminal offence</p>	<p>Criminal offence Cruelty to animals as outlined in the <i>Animal Welfare Act 2002 (WA)</i></p> <p>Extract from legislation: 19. Cruelty to animals</p> <p>(1) <i>A person must not be cruel to an animal.</i> <i>Penalty: Minimum – \$2000. Maximum – \$50 000 and imprisonment for 5 years.</i></p> <p>(b) <i>uses a prescribed inhumane device on the animal;</i></p>	<p>Participants in the case:</p> <p>Offender: Man from Perth's southern suburbs Witness: Community member who saw magpies caught in traps in the man's garden. Provided an eyewitness account to the court. RSPCA WA Chief Inspector: Prosecuting offenders who breach the Animal Welfare Act 2002 (WA) Magistrate: Presided over the case, enforced rules of evidence and procedure and handed down sentence to accused.</p>
<p>Court This case was heard in the Magistrates' Court of WA</p> <p>Jurisdiction The Magistrates' Court has the power to hear criminal offences involving adults (aged 18 or over) The court deals with 'simple offences' and some 'either way offences'. More serious offences commence proceedings in the Magistrates' Court, but must be heard in the District or Supreme courts. Fined, plead, guilty, animal cruelty, sentenced, Magistrates' Court, criminal offence</p>	<p>Outcome The accused was found guilty and was fined \$4000.</p>	<p>Appeal If the accused wished to appeal his conviction or sentence he would need to apply to the Supreme Court of WA within 28 days of receiving the Magistrates' Court's decision.</p>

Step 2: Analysing

Find a newspaper article that relates to a Western Australian criminal case.

- Make a list of the legal terminology used in the article. Create a glossary by defining each of these terms.

Legal term	Definition
<i>Prosecution</i>	

- **Identify** the main participants (e.g. the victim, prosecution, accused, police, etc.) and **explain** each of their roles in this case.
- **Identify** the crime or simple offence that has allegedly been committed.
- Which court presided over this case? **Outline** the jurisdiction of this court (the cases this court has the power to hear).
- Was the accused found guilty or not guilty in this case? If they were found guilty, what sentence (punishment) did they receive?
- If a party to your case wishes to appeal the decision, outline which court has the power to hear the appeal.

Step 3: Evaluating

- Review the range of penalties that apply to your offence. **Evaluate** the appropriateness of these penalties.
- If the accused person was found guilty, was the penalty given appropriate? **Justify** your opinion.
- If the accused person was found not guilty, do you agree with this decision? Give reasons for your answer.

Step 4: Communicating and reflecting

- To present your research, paste a copy of your article in the centre of a poster and annotate the article with your information.
- Remember: you may need additional research to fully complete this task.
- Use appropriate images or diagrams to add interest to your information.
- Use the template in your digital documents to help you present your research.

LESSON 4.8 Review

4.8.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

4.2 Statutes: Making laws through parliament

- Statute law (or an Act or legislation) must be passed through both houses of parliament in the form of a Bill, which must then be approved by the Crown.

4.3 Common law: Making laws through the courts

- Courts interpret laws and make decisions to resolve the cases they are hearing, and in doing so create precedents that will be followed by other courts.

4.4 Types of law: Criminal and civil law

- Criminal law protects the community as a whole. It incorporates crimes including robbery, manslaughter and murder. The police or a representative of the government (the prosecution) takes the accused (the defendant) to court. There, a consequence such as a fine or imprisonment may be imposed.
- Civil law protects the private rights of individuals. It incorporates civil wrongs including negligence, defamation and breach of contract. A person who feels that a civil wrong has been done to them (the plaintiff) will sue the other party (the defendant) in court.

4.5 Customary law in Aboriginal and Torres Strait Islander communities

- Aboriginal and Torres Strait Islander customary law provides guidance for how to behave and live. Disputes or incidents are resolved by the Elders, who agree on an appropriate solution or consequence.
- Sentencing courts that incorporate customary law have had positive outcomes.

4.6 Young people and the law

- Children under the age of 10 cannot be charged with a criminal offence.
- You must give your name and address to police and provide ID if they request it.
- A juvenile offender can have a responsible person or independent witness present during police questioning.
- The right to silence means you do not have to answer police questions, beyond those related to identity.
- It is a criminal offence to disobey move-on orders given by the police.

4.7 Inquiry: Western Australian court case investigation

- In this Inquiry students will investigate a recent criminal case in Western Australia.

4.8.2 Key terms

accused the party in a criminal trial against whom an action has been brought

Act a law passed by parliament

balance of probabilities requires reasonable satisfaction that the facts as presented are probably correct and occurred as stated

beyond reasonable doubt based on evidence, there is no other logical conclusion that can be made other than that the accused is guilty

Bill a proposed law that has not yet been agreed to by parliament or received royal assent

binding precedent a decision made in a higher court in the same court hierarchy that must be followed by a lower court where the facts of the cases are similar

breach of contract a situation where a legally binding agreement is not honoured by one or more of the parties to the contract

burden of proof the legal principle describing who has to prove a case in court. In a criminal trial, this burden is on the prosecution.

codified refers to laws that have been collected and organised, usually in written form

common law law developed by judges through the decisions of courts

Crown the King's authority in the Australian parliament, represented by the governor-general at the federal level and a governor at the state level

customary law rules for behaviour developed by and for Aboriginal and Torres Strait Islander Peoples

defamation unlawful damage to a person's good reputation through written or verbal statements

defendant the party in a civil trial against whom an action has been brought

dispute an argument

homicide the killing of one person by another person

indictable offence a serious criminal offence such as murder or armed robbery

intergenerational trauma trauma that has lasting effects carried on from those who directly experienced it to their children and grandchildren

jury in a criminal trial, a randomly selected group of people who decide the guilt or innocence of an accused person

juvenile a young person aged between 10 and 17 who will be dealt with through the youth justice system. Once a person turns 18, they are considered an adult and will be dealt with under the adult justice system.

legislation a law made by parliament

liable legally responsible for a civil wrong

magistrate a court official who hears cases in the lowest court in the legal system

manslaughter the accidental or unintentional killing of one person by another person

negligence a situation where a person breaches a duty to exercise reasonable care to avoid a foreseeable risk, resulting in another person being injured or suffering a risk of injury

nuisance interference with someone's enjoyment of public or private property

opposition the main political party in the lower house of parliament that's not in power

persuasive precedent a decision made in a lower court or a court in a different hierarchy that does not have to be followed but may be used as a guide

plaintiff the person who commences a legal action in civil law

precedent a legal principle developed by a court in the process of resolving a dispute

presumption of innocence a person charged with a criminal offence should be treated as innocent, until evidence presented in court proves they are guilty

prosecute to take legal action against another person for a criminal offence

prosecution legal action is initiated by the state. A prosecutor will present evidence to the court to establish guilt.

responsible adult a parent, guardian or youth worker

standard of proof the level of proof required to establish a case. In criminal law, the prosecution must prove that the accused is guilty beyond reasonable doubt.

statute law law made by parliament

summary offence a minor criminal offence such as a road traffic offence and minor assault

trespass a tort (civil wrong) involving direct and intentional interference with a person, or a person's land or goods

4.8.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Where do our laws come from and why should they be obeyed?

1. Now that you have completed this topic, what is your view on the question? **Discuss** with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

learn on

-  **Post-test** Online post-test
-  **eWorkbooks** Customisable worksheets for this topic
Reflection
-  **Digital document** Key terms glossary

4.8 Review exercise

Learning pathways

■ LEVEL 1

1, 2, 6, 9, 10, 12

■ LEVEL 2

3, 4, 5, 7, 8, 11

■ LEVEL 3

13, 14, 15

REMEMBER AND UNDERSTAND

1. Parliament makes laws by passing Bills. What must happen for a Bill to become a law?
 - A. Pass the lower house, pass the upper house and receive royal assent
 - B. Be passed by the Labor Party, be passed by the Liberal Party and be approved by the governor-general
 - C. Be passed by a lower court, be passed by a higher court and receive the approval of the High Court
 - D. Be agreed to by all of the parties
2. Identify which of the following would be considered an example of 'customary law'?
 - A. Imprisonment
 - B. A fine
 - C. Sparring
 - D. Welcome to Country
3. Identify the name given to a law made by the courts.
 - A. Legislation
 - B. A Bill
 - C. An Act
 - D. Common law
4. Review the following statements and identify which involves a precedent.
 - A. Parliament passing new laws banning smoking
 - B. A court finding that a contract existed due to a ruling made in a similar case in a higher court
 - C. A court imposing a penalty for non-payment of speeding fines
 - D. Parliament blocking a new law for immigration

5. In relation to questioning juvenile offenders, a responsible adult is defined as:
 - A. an older relative of the juvenile, such as an uncle or older sibling.
 - B. a parent, guardian or youth worker.
 - C. any adult over the age of 21.
 - D. a police officer who is not connected with the case.
6. Criminal laws are the laws made to:
 - A. be passed by both houses of parliament and approved by the Crown.
 - B. protect the community from harm.
 - C. develop legal principles in the process of courts resolving disputes.
 - D. protect the private rights of individuals.
7. Suing another person for negligence is an example of:
 - A. criminal law.
 - B. statute law.
 - C. contract law.
 - D. civil law.
8. Identify the standard of proof in a criminal case.
 - A. On the balance of probabilities
 - B. With room for some doubt
 - C. Beyond reasonable doubt
 - D. When the jury does not like the person
9. Under Aboriginal and Torres Strait Islander customary law, identify how disputes or incidents are resolved.
 - A. Police will charge you and take you to court.
 - B. Courts will examine all the evidence before them.
 - C. Elders agree on an appropriate solution or consequence.
 - D. Parliament passes laws through both houses.
10. Identify the statement that best describes Aboriginal and Torres Strait Islander customary law.
 - A. These are laws passed through parliament that only apply to Aboriginal and Torres Strait Islander Peoples.
 - B. This is civil law that only applies to Aboriginal and Torres Strait Islander Peoples.
 - C. These are rules and guidelines for behaviour for Aboriginal and Torres Strait Islander Peoples.
 - D. This is a set of rules for behaviour that applied in Aboriginal and Torres Strait Islander cultures before colonisation.

ANALYSE AND APPLY

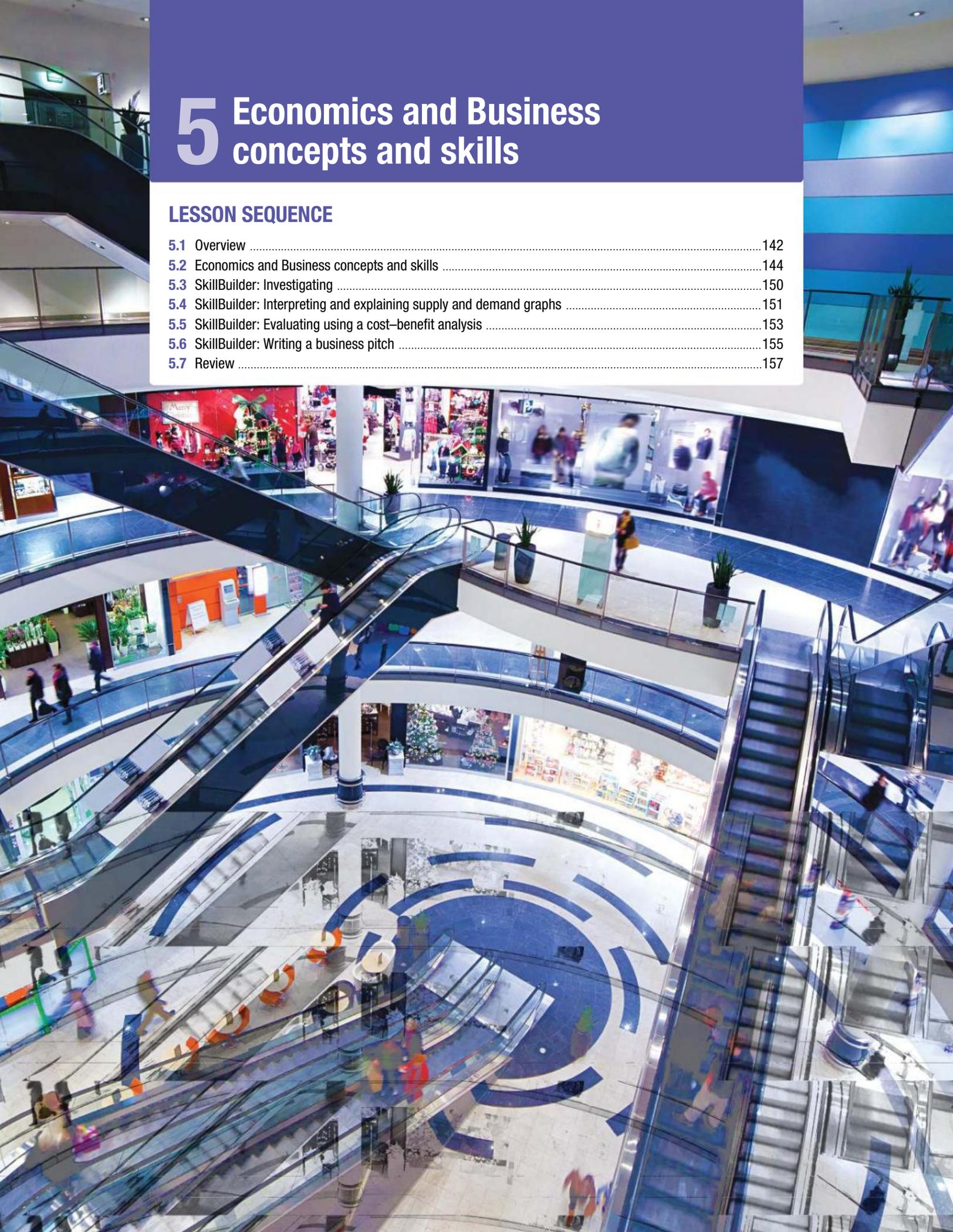
11. **List** the steps involved when laws are made.
12. **Explain** the difference between criminal and civil law.
13. **Explain** what is meant by customary law and explain how it originated.
14. **Explain** what is meant by the right to silence and how it supports the presumption of innocence.
15. Bob, aged 15, was questioned by the police in relation to a series of burglaries; his friend attended the interview.
Explain why any statements made during the interview can be challenged in court and what this might mean for the case against Bob.

Answers and sample responses for this topic are available online.

5 Economics and Business concepts and skills

LESSON SEQUENCE

5.1 Overview	142
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LESSON 5.1 Overview

INQUIRY QUESTION

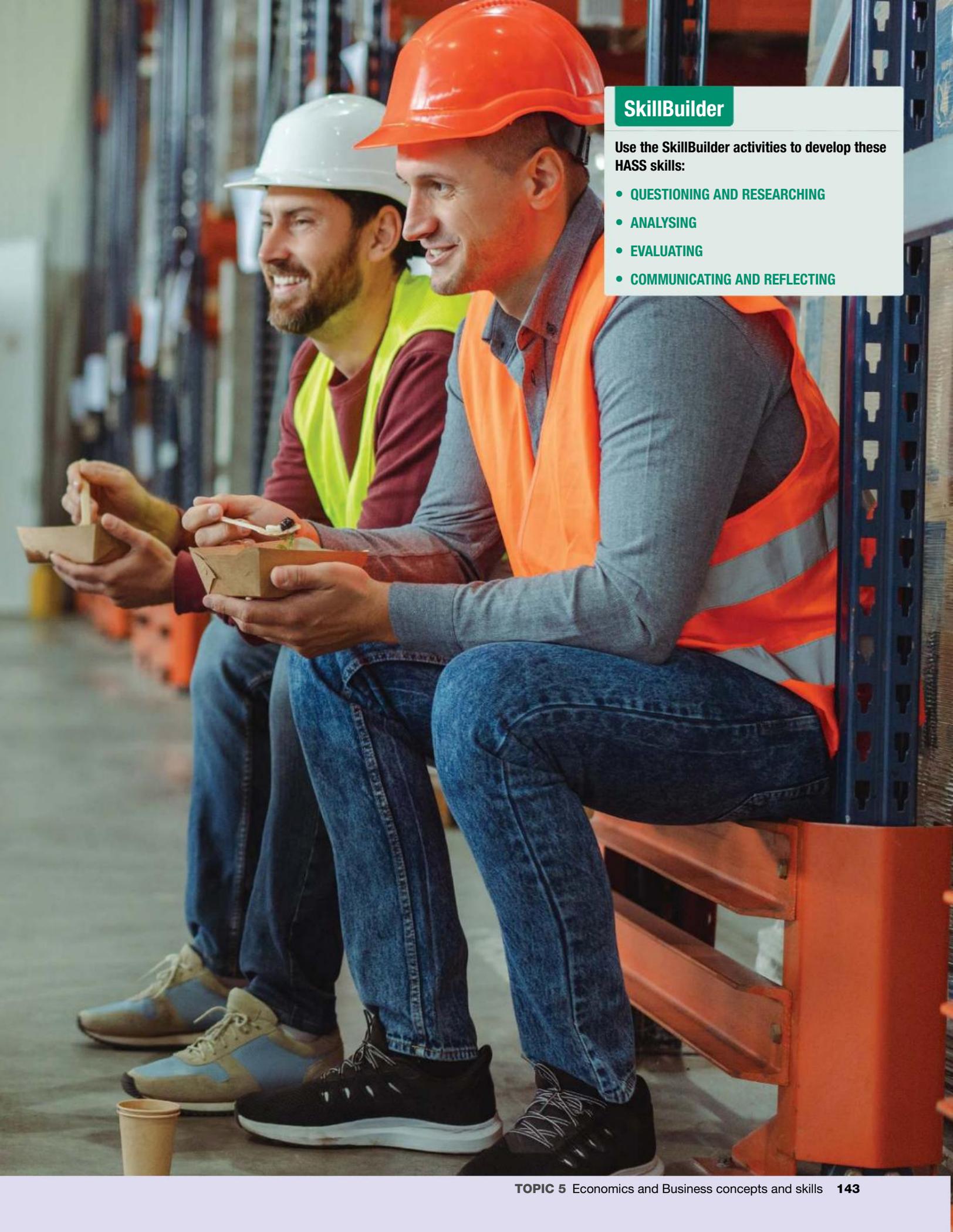
How do individuals and businesses in Australia plan and budget to achieve financial goals while ensuring consumer rights and responsibilities are upheld?

Australia's **economy** is a blend of private businesses and government working together to decide what goods and services we get. Imagine saving a bit of money each week to buy the latest smartphone or planning ahead to buy your dream house or car — that's how the **market** works, deciding what's available based on what people want and how much they're willing to pay. On top of that, the taxes we pay help the government provide important services like healthcare, education and transport. And when the market can't quite cover it, the government steps in to make sure we have the essentials. Plus, as consumers, we have rights like warranties and safety recalls to keep things fair and safe. Dive into this exciting world of money decisions and consumer rights in Australia.

learn on

-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital document**
Key terms glossary
-  **Video eLesson**
Economics and Business concepts and skills



A photograph of two men in a warehouse setting. They are both wearing hard hats and high-visibility vests. The man in the foreground is wearing an orange hard hat and an orange safety vest over a grey long-sleeved shirt and blue jeans. He is sitting on a wooden crate and eating from a brown paper food container. The man behind him is wearing a white hard hat and a yellow safety vest over a maroon long-sleeved shirt and blue jeans. He is also eating from a brown paper food container. They are both smiling and looking towards the right. The background shows industrial shelving units in a warehouse.

SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

LESSON 5.2 Economics and Business concepts and skills

LEARNING INTENTION

By the end of this lesson, you should be able to **explain** the Economics and Business concepts and skills.

5.2.1 Introduction

Economics and Business is about understanding how people use resources and make decisions. **Economics** looks at how goods and services are produced, distributed and consumed. It explores concepts like supply and demand, prices and how markets work. **Business** focuses on how companies operate, make profits and provide goods and services. It includes topics like marketing, management and finance. Together, Economics and Business help us understand how the economy functions and how businesses contribute to society. This knowledge is useful for making informed decisions in everyday life and for future careers. There are six key concepts that underpin your study in Economics and Business. These are shown in **TABLE 1**.

5.2.2 Economics and Business concepts

There are six concepts that underpin Economics and Business

TABLE 1 The key concepts in Economics and Business help make sense of the world.

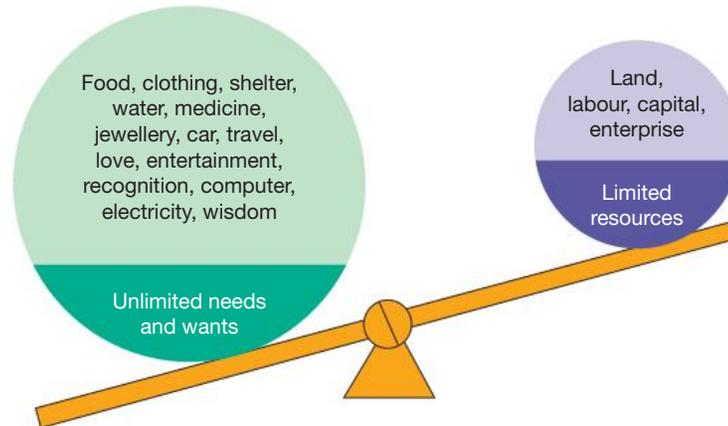
Concept	Description
Scarcity	Learn about the economic problem of having unlimited needs and wants, but limited resources to satisfy them.
Making choices	We need to make choices about how resources are used. Making choices about alternatives is an important part of economics.
Allocation and markets	Making decisions about how we will use resources is known as resource allocation . The market answers most of the economic questions and is where buyers and sellers negotiate prices for goods and services.
Specialisation and trade	Specialisation is when workers, businesses or nations focus on one task or on making one product. Countries trade when they buy and sell products from each other.
Interdependence	This is the mutual reliance in an economy, where consumers, workers, businesses and governments depend on each other.
Economic performance and living standards	Economic performance is how well a country's economy is doing based on its goals. This is linked to standard of living, which is how good life is, measured by how much money people make.

5.2.3 Scarcity

In economics, scarcity is the basic economic problem. Scarcity means people have unlimited **needs** and **wants**, but limited **resources** to satisfy them. It's the concept of making choices about which wants we satisfy first. This problem is always present in all economies.

Needs are items that people must have in order to survive, such as food, water and clothing. Wants are a wish or desire for something that will make life more enjoyable for a person, and are not necessary for survival. In order to make good choices with their available resources, people must know the difference between needs and wants.

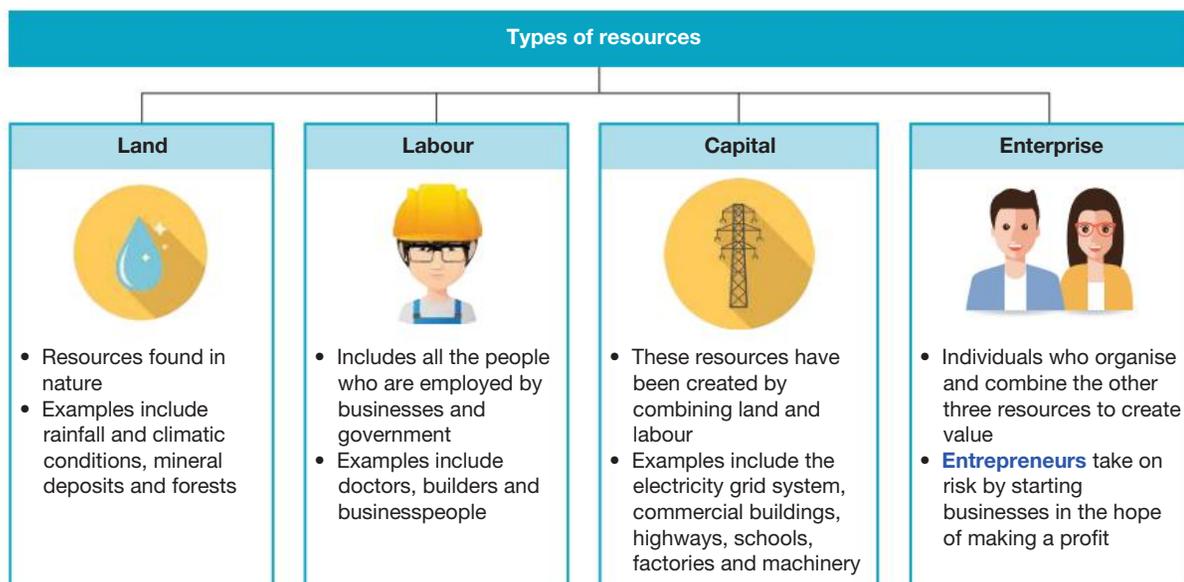
FIGURE 1 The basic economic problem is scarcity, where we have unlimited needs and wants, but limited resources to satisfy them all — this creates an imbalance.



However, the difference between a need and a want is sometimes not clear. Generally, most of us would say that needs include shelter, health care and access to good hygiene facilities. You might say that a car, computer, internet and mobile phone are wants. However, many people would suggest that these are needs.

To satisfy our needs and wants, businesses use resources to produce goods and services. There are four main types of economic resources: land, labour, capital and enterprise. These types of resources can be seen in **FIGURE 2**.

FIGURE 2 There are four main types of economic resources: land, labour, capital and enterprise.



To produce goods and services, resources usually need to be combined. For example, to bake a loaf of sourdough bread, we need flour, water and salt (land resources), an oven (capital resource) and a baker (labour resource). Unfortunately, as we have seen, the resources available to us are limited. We can only produce a certain amount of goods and services from these resources. We are not able to satisfy the unlimited needs and wants of society. Because of **economic scarcity**, we must choose some things, which means giving up other things.

5.2.4 Making choices

In economics, **opportunity cost** refers to what you give up when making a choice due to scarcity. It represents the sacrifice made when choosing one option over another. Every decision involves an opportunity cost.

For example, Ayesha can buy either a new book or a pair of earrings, but not both. She chooses the book, and the opportunity cost is the earrings she did not purchase.

Consumers, businesses and governments all consider opportunity cost in their decisions. Consumers make choices about purchases, work and leisure. Businesses decide what products to produce and how to meet customer needs. Governments determine how to manage society and the economy effectively.

SkillBuilder discussion

Communicating and reflecting

1. Mind-map with a partner some of the opportunity costs that you or someone you know may have faced in the last week.
2. Discuss how these decisions can be complicated.
3. Why do people have to make a 'trade-off'? Can you explain this in economic terms?

FIGURE 3 The cost of buying a video game is not just the price paid, but also the opportunity cost of not being able to spend the money on something else.



5.2.5 Allocation and markets

All economies must **allocate** scarce resources to satisfy endless needs and wants. This process, called resource allocation, addresses the basic economic problem through an established **economic system**.

An economic system is the way we organise the production and distribution of our goods and services. Australia's economic system is a **market capitalist economy**, where buyers and sellers negotiate prices in a market. All economic systems must answer three basic economic questions:

- What to produce
- How to produce
- For whom to produce

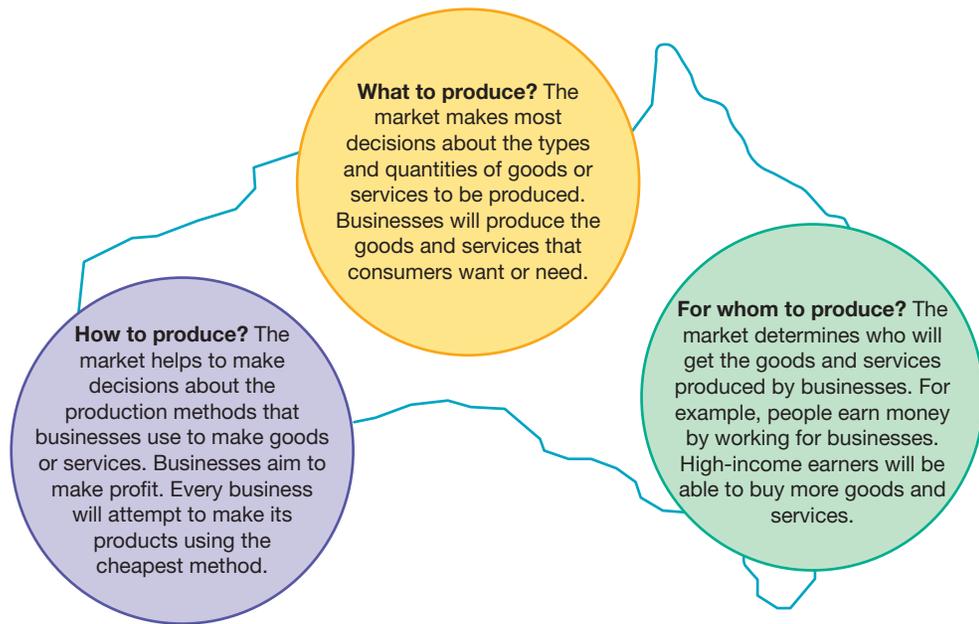
For example, a farmer must decide what to grow on her available land. Does she grow apples or avocados? Then she must decide how to produce the crops. Does she grow organic crops, use high-tech machinery or hire workers to harvest the fruit? And who will she sell her fruit to? A supermarket chain, direct to consumers at a farmers' market or to cafes and restaurants? These questions are summarised in **FIGURE 4**.

SkillBuilder discussion

Analysing

1. Think of and list some of the weird and wonderful things that you can buy.
2. How do you think businesses decide on what to produce?
3. Do you think that there are products that shouldn't be produced at all? What might these be?

FIGURE 4 Australia's economic system answers the three economic questions through the market.



5.2.6 Specialisation

Specialisation is when workers, businesses or nations focus on a specific task or product. This efficient use of resources can be seen in assembly lines where each worker or machine performs one distinct task. For example, in food manufacturing, each worker completes a specific task, allowing the business to produce many products quickly. If one person were responsible for the entire production line, it would be much slower.

Countries also specialise by focusing on products they produce efficiently. They trade these products with other countries that specialise in different items. For instance, Australia exports iron ore, coal and wheat, while importing processed fuels, cars and electronics. Businesses and consumers trade goods and services, like buying products in a store.

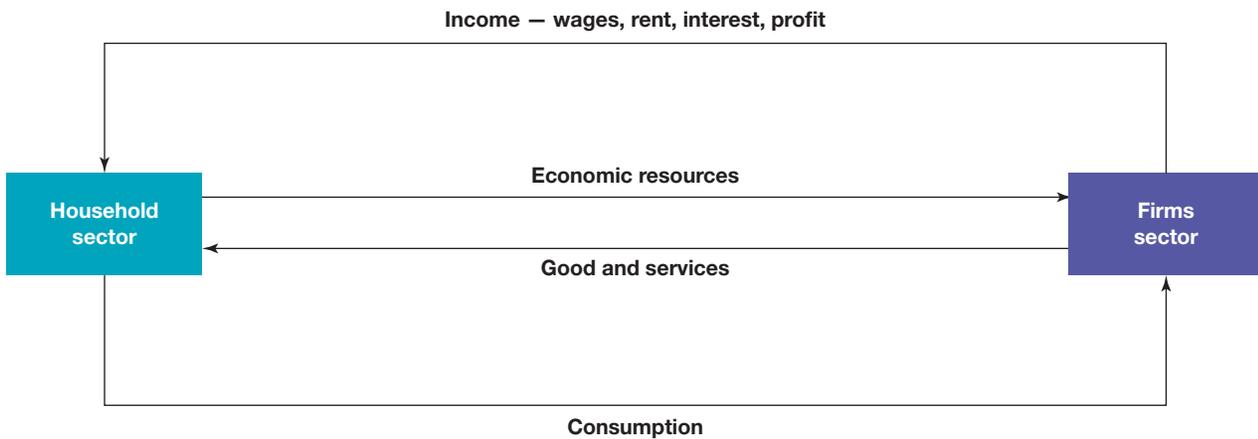
FIGURE 5 Specialisation can be seen on a production line. It is organised to maximise efficiency.



5.2.7 Interdependence

Interdependence means that people and things rely on each other, affecting each other's actions. In an economy, consumers, workers, businesses and governments all depend on each other. For example, a cafe needs customers to make money, and customers need jobs to earn money to spend at the cafe. This mutual dependence ensures that all parts of the economy are connected.

FIGURE 6 A simple two-sector circular flow model of income, demonstrating the interdependence between consumers and businesses.



5.2.8 Economic performance and living standards

The main aim of an economy is to satisfy the needs and wants of its people by producing goods and services efficiently. In Australia, the government manages the economy and aims for low inflation, economic growth, and full employment.

Economic performance is measured using indicators such as:

- *Gross Domestic Product (GDP)*: Measures economic growth.
- *Unemployment rate*: Indicates the number of people without jobs.
- *Inflation rate*: Indicates changes in the prices of goods and services.

These measurements help the government make decisions to improve economic growth and living standards

5.2.9 HASS skills

In addition to the concepts in Economics and Business, you will also develop four key HASS skills.

TABLE 2 The four HASS skills that you will develop in Year 8.

Skill	Description
Questioning and researching	Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources. In Year 8 Economics and Business, this includes conducting research on the the role of the government in the market.
Analysing	Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole. In Year 8 Economics and Business, this includes interpreting supply and demand graphs to explain how the price of certain goods is determined.
Evaluating	Evaluating means examining your interpretations of information to draw evidence-based conclusions. It requires taking into account ambiguities and multiple perspectives in a source and proposing potential responses to contemporary challenges or issues. In Year 8 Economics and Business, this includes evaluating a business opportunity with a cost-benefit analysis.
Communicating and reflecting	Communicating your ideas means presenting information in a range of formats to suit the intended audience and purpose. This includes essays, oral presentations, debates, tables and cartoons. Reflecting on your skills is also an important part of the process. In Year 8 Economics and Business, this includes learning how to write a business pitch for a new product or a new business idea.

5.2 SkillBuilder activity ANALYSING

Testing the law of demand, law of supply and equilibrium

1. In small groups, **create** a fictional business (e.g., smoothie stall, tech gadget, eco-clothing).

Then answer the four economic questions:

- What will you produce?
- How will you produce it?
- For whom will you produce it?
- How much will you produce?

Share your decisions and explain how you made your choice.

2. Each group now sets a price for their product.

- The class acts as consumers with a limited budget.
- Students 'buy' products by placing tokens or stickers.
- Groups can adjust prices based on demand (too many or too few buyers).
- Discuss** how prices moved toward an equilibrium.

5.2 Exercise

learn**on**

Learning pathways

■ LEVEL 1

2, 4, 7

■ LEVEL 2

1, 3, 5, 8

■ LEVEL 3

6, 9, 10

REMEMBER AND UNDERSTAND

- Which of the following is an example of a capital resource?
 - A forest
 - A baker
 - A factory
 - Rainfall
- Scarcity exists because we have unlimited needs and wants but limited resources. True or false?
- Which of the following best describes opportunity cost?
 - The money you save when buying something on sale
 - The next best alternative given up when making a choice
 - The total cost of all options
 - The price of a product
- In a market capitalist economy like Australia's, the government decides what to produce. True or false?
- Which of the following is not one of the three basic economic questions?
 - What to produce?
 - How to produce?
 - Where to produce?
 - For whom to produce?

ANALYSE AND APPLY

- What is meant by the term 'scarcity'?
- List the four types of economic resources and give one example of each.
- Explain** how the market decides what to produce in Australia.

EVALUATE AND COMMUNICATE

- Why might the government provide services like healthcare and education?
- Describe** what is specialisation and **explain** how it helps production.

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **develop** and **apply** questions to investigate contemporary Economics and Business issues. Conducting research is an integral part of the questioning and researching HASS skill.

5.3.1 Tell me

While studying Economics and Business, you will develop and use a range of questions to form the basis of research.

The following steps are a useful guide to the process of writing questions and carrying out research.

- Develop a series of specific questions that will help guide your research in the appropriate direction, and help you determine the information you need.
- Locate appropriate sources of that information.
- Record relevant information from a range of sources.
- Present the information in an appropriate form.

5.3.2 Show me

Imagine you have been presented with the following information on tax rates during 2024–25.

TABLE 1 Resident tax rates 2024–25

Taxable income	Tax on this income
0–\$18 200	Nil
\$18 201–\$45 000	16c for each \$1 over \$18 200
\$45 001–\$135 000	\$4288 plus 30c for each \$1 over \$45 000
\$135 001–\$190 000	\$31288 plus 37c for each \$1 over \$135 000
\$190 001 and over	\$51 638 plus 45c for each \$1 over \$190 000

Your first step is to create a list of questions that you have about this information. You may be wondering about the following:

1. What are the tax rates now?
2. Does everyone pay tax at these rates?
3. Why do I need to pay tax?

You can then start to think about how you might answer these questions.

- The Australian Tax Office website is a very good place to start.
- You may also visit other government or current affairs websites for more information and even opinions.
- You can then think about how to present the information in an appropriate form.

5.3.3 Let me do it

Complete the following activity to practise this skill.

5.3 SkillBuilder activity QUESTIONING AND RESEARCHING

Using the process in section 5.3.2 as a model, devise a series of questions and carry out the research to produce a report on the following key question:

Prepare a short information session on income tax in Australia. Your information should include but not be limited to:

- what income tax is
- why it is paid by employees
- what rates it is paid at
- finally whether you think it is fair.

LESSON 5.4 SkillBuilder: Interpreting and explaining supply and demand graphs

LEARNING INTENTION

By the end of this SkillBuilder you should be able to accurately **interpret** and **explain** the data displayed in supply and demand graphs. Interpreting and explaining graphs is part of the analysing HASS skill.

5.4.1 Tell me

Analysing is another skill that you will develop while studying Economics and Business. This skill involves interpreting information to identify the main features or ideas. You then examine the information closely to determine how the parts relate to the whole. One way in which you might analyse in economics and business is by interpreting and explaining information in tables and graphs.

In section 5.2.5 we explored the idea that the market answers most of the economic questions. Typically, buyers want to pay as low a price as possible while sellers want to charge as high a price as possible. From these different preferences, the market will usually arrive at a price that is acceptable to both buyers and sellers. We can interpret and explain how this works through the use of simple tables and graphs.

5.4.2 Show me

Imagine a fruit and vegetable market such as the Fremantle Markets. These markets have various businesses competing, allowing buyers to compare prices and quality. Assume all stalls sell potatoes and most sellers agree on the following:

- at \$10/kg, they would supply 200 kg of potatoes a day
- at \$7/kg, they would supply 150 kg a day
- at \$5/kg, they would only supply 100 kg a day
- at \$2/kg, they would supply 30 kg of potatoes a day and focus on other produce that would make a bigger profit.

FIGURE 1 There are multiple fruit and vegetable shops at the Fremantle Markets. Can you think of any factors that could influence a customer's decision on where to shop?



Buyers aim to buy at the lowest price possible and agree on the following:

- at \$10/kg, only a few would buy, totalling 10 kg a day
- a \$8/kg, they might purchase 40 kg a day
- a \$6/kg, they might purchase 80 kg a day
- a \$4/kg, they might purchase 120 kg a day
- a \$2/kg, they might purchase 160 kg a day.

As the price rises, suppliers supply more but consumers demand less. Conversely, as the price falls, consumers demand more but suppliers supply less. What price will satisfy both buyers and sellers?

We can start to answer this by putting the above data into tables. **TABLES 1 and 2** show the sellers' preferences and the buyers' preferences.

Price per kg	Quantity supplied
\$2	30 kg
\$5	100 kg
\$7	150 kg
\$10	200 kg

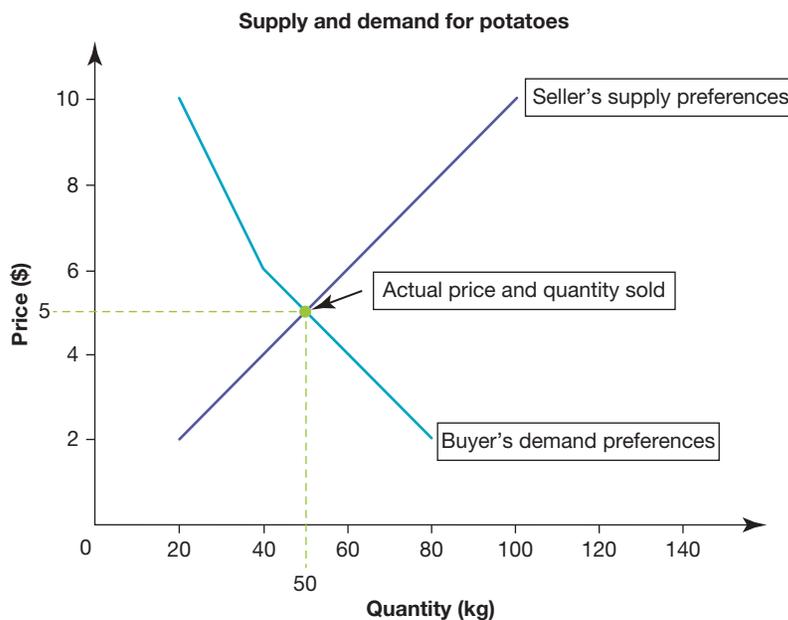
Price per kg	Quantity purchased
\$10	10 kg
\$8	40 kg
\$6	80 kg
\$4	120 kg
\$2	160 kg

These tables show that as the price rises from \$2/kg, the supply of potatoes increases from 30 kg to 200 kg when the price reaches \$10/kg. Similarly, as the price falls from \$10/kg, the demand for potatoes increases from 10 kg to 160 kg at \$2/kg.

We can use this data to create a graph. Placing prices along the vertical axis and quantities on the horizontal axis, we plot buyers' and sellers' preferences. The sellers' preferences appear as a purple line, and buyers' preferences as a blue line. Their intersection point is known as the 'equilibrium price', and the quantity sold at this price is the 'equilibrium quantity'.

In this market, the equilibrium is at 50 kg of potatoes sold each day at \$5/kg. Sellers will be able to sell their 50 kg stock at this price daily.

FIGURE 2 Supply and demand graph for potatoes



5.4.3 Let me do it

Complete the following activity to practise this skill.

5.4 SkillBuilder activity ANALYSING

In the same fruit and vegetable market, tomatoes are also subject to similar buyer and seller preferences.

Sellers agree on the following:

- at \$14/kg, they would supply 200 kg of tomatoes a day
- at \$8/kg, they would supply 100 kg a day
- at \$3/kg, they would supply 10 kg a day.

Buyers generally agree on the following:

- at \$14/kg, buyers might purchase 20 kg a day
- at \$10/kg, buyers might purchase 70 kg a day
- at \$8/kg, buyers might purchase 100 kg a day
- at \$2/kg, buyers might purchase 180 kg a day.

1. **Create** a table showing the quantities sellers would supply at each price.
2. **Create** a table showing the quantities buyers would demand at each price.
3. **Analyse** the tables and predict the equilibrium price and quantity for tomatoes.
4. Plot the data on a graph to show supply and demand preferences.
5. **Identify** the equilibrium price and quantity for tomatoes (in other words, what is the price per kilogram at which buyers and sellers preferences would be matched, and what quantity would be sold at that price)?

LESSON 5.5 SkillBuilder: Evaluating using a cost–benefit analysis

LEARNING INTENTION

By the end of this SkillBuilder you will be able to use a cost–benefit analysis to effectively **evaluate** a business opportunity.

5.5.1 Tell me

Evaluating means to draw evidence-based conclusions by evaluating information and/or data and to make comparisons and evaluate costs and benefits based on the evidence. This is a skill that you might develop in Economics and Business by looking at the benefits or advantages of something and then examining its costs or disadvantages.

A cost–benefit analysis is a detailed examination of the strengths and weaknesses of different alternatives in order to see whether the benefits outweigh the costs.

The principle behind a cost–benefit analysis is that you should only decide to act on an alternative if the benefit from taking it is greater than the cost.

A cost–benefit analysis helps to determine if an option will be a good decision or investment. It is also useful for comparing alternatives or projects, as well as estimating the resources needed to complete the alternative or project.

A good cost–benefit analysis:

- identifies opportunities
- calculates the costs and benefits
- compares the costs and benefits to determine if the benefits outweigh the costs
- makes a decision about the best alternative to recommend.

FIGURE 1 A cost–benefit analysis involves weighing up the pros and cons of a decision. You are doing it every day without even realising. Can you think of any examples?



5.5.2 Show me

Cost–benefit analysis of saving \$10 per week

Costs

- Reduced immediate spending power: saving \$10 per week means you will have \$10 less to spend on immediate needs or wants.
- Opportunity cost: the money saved could have been used for other investments or to purchase goods or services that could provide immediate satisfaction or utility.

Benefits

- Accumulated savings: over a year, saving \$10 per week will result in a total saving of \$520.
- Interest earnings: if the saved amount is deposited in an interest-bearing account, it could earn additional money over time.
- Financial security: having savings can provide a safety net for unexpected expenses or financial emergencies.
- Future investment: accumulated savings can be used to invest in opportunities that might yield higher returns.
- Goal achievement: regular savings can help in achieving long-term financial goals such as buying a house, funding education, or planning a vacation.

Overall, given the benefits, you may decide to save half of the allocated money per week so that you strike a balance between spending and saving.

5.5.3 Let me do it

Complete the following activity to practise this skill.

5.5 SkillBuilder activity **EVALUATING**

You can now carry out this process to complete a cost–benefit analysis using the case study. Complete the activities that follow to practise this skill.

CASE STUDY: Uncle Bill's

You have been asked by a friend who has their own catering business whether they should start to offer a delivery service. The business makes cakes and sandwiches, and serves workers in a busy city location.

1. Complete a cost–benefit analysis of this idea — you may need to do some extra research to establish whether your cost–benefit analysis is accurate.
2. Offer advice to your friend as to what they should do. You will need to write this as a recommendation and base it on evidence.

Make sure you can present your analysis in an appropriate format.

LESSON 5.6 SkillBuilder: Writing a business pitch

LEARNING INTENTION

By the end of this SkillBuilder you will be able to prepare, research, structure and write a pitch for a new product or business idea.

5.6.1 Tell me

When you use the skill of communicating and reflecting in Economics and Business, you will be presenting your findings or information using an appropriate format to suit an audience and purpose. You will also need to use terminology that is used by economists and businesspeople. For example, when writing a case study on a business, you would be expected to use business terminology and write as if your audience are people who are interested in studying businesses.

A pitch is a speech or presentation given by a prospective business owner, where they attempt to persuade an audience (often a group of investors) to see that their idea for a product or a business is a good one. With a good pitch, the business owner hopes the investors will choose to invest in the new product or business idea.

5.6.2 Show me

Elements of a good business pitch

A good business pitch:

- has an introductory statement that will grab attention
- clearly defines the problem the business owner is solving
- explains what the new product is or what the business idea is about
- outlines why the new product/business idea is unique and/or better than the competition
- is easy to understand
- is well-presented.

FIGURE 1 A business pitch is sometimes called an 'elevator pitch' because the listener should be able to understand the idea or concept in a short amount of time.



CASE STUDY

Inventing self-service machines

The man who invented the self-service checkout system, Dr Howard Schneider, was laughed at when he first pitched his machine to a supermarket chain in the 1980s. Back then, the idea of replacing humans with an object seemed ridiculous. Today, we can see how much the world has changed.

The use of self-checkout systems is steadily increasing in Australia, even though some shoppers find them frustrating and difficult to use. Messages about unexpected items in the bagging area or the inability to locate pomegranates in the fruit category can lead to frustration and irritability and thus also customer dissatisfaction. Other people love the new invention because it provides convenience when they just 'pop in' for a few items.

However, the machines are yet to provide a complete win for the stores, because they must still 'staff' the self-checkout areas to provide help with working the systems and in order to combat theft. Nevertheless, newer modules are already being built with increased scanning accuracy.

FIGURE 2 Self-serving machines at a supermarket



5.6.3 Let me do it

Complete the following activity to practise this skill.

5.6 SkillBuilder activity

COMMUNICATING AND REFLECTING

Have a go at writing your own pitch for a new product or business idea. Your task is to plan a unique business using the guidelines below and then prepare a business pitch. You will be able to work by yourself or with a group. Your teacher will determine the maximum and minimum group sizes.

Your first step is to develop a new product or business idea. Some suggestions are:

- a new style of shoe incorporating state-of-the-art technology
- a healthy snack-food option
- a new technology for creating energy
- a new type of home service
- a unique social media website or app.

Use the following points to guide your preparation for your pitch:

- the name of the new product or the name of the business and what products it will sell
- business logo
- description of what the business will do
- type of business ownership
- location of business
- target market information — who your customer is and why they need your new product or business
- a list and explanation of the qualities you possess and that your partner(s) may possess that will make your new product or business a success
- what your competitive advantage is.

The pitch should be delivered as a written report but could also be given as an oral or multimodal presentation.

5.7.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

5.2 Economics and Business concepts and skills

- Scarcity is the ‘basic economic problem’, and this involves society having limited resources available to satisfy unlimited needs and wants.
- The four main types of economic resources are land, labour, capital and enterprise.
- Every choice made involves an opportunity cost, which is the next best alternative given up whenever a choice is made.
- All economies must make decisions about how resources will be allocated among producers and what types of goods and services will be produced. This means economies must answer the three economic questions: What to produce? How to produce? And for whom to produce?
- Australia is a market capitalist economy, which means that most answers to the three economic questions are made by the market (where buyers and sellers negotiate prices for goods and services).
- Governments may need to intervene in the economy to reduce inefficiencies.
- Modern economies have developed a method of production called specialisation, where a worker, business or nation focuses on the production of a limited range of goods or services to increase production and provide a surplus that can be used to trade.
- Participants in an economy are mutually dependent (or interdependent); that is, consumers, workers, businesses and governments are reliant on each other.
- Our economy and government have a number of economic objectives, including satisfying the needs and wants of citizens by efficiently producing as many goods and services as possible, and achieving low inflation, economic growth and full employment.
- Economic performance can be measured through key economic indicators, including gross domestic product, the unemployment rate and the inflation rate.
- Standard of living refers to the quality of life of individuals or countries, and this is influenced by the level of economic activity.
- The skills you will develop across all your HASS subjects fall into four main groups:
 - *Questioning and researching*: This involves posing statements that require answers, particularly in regard to what is known and what is not known in order to improve your knowledge. Research is important because it allows us to find out what is unknown and contributes to filling in gaps in our knowledge.
 - *Analysing*: This involves interpreting information to identify the main features or ideas, and then examining the information closely to determine how the parts relate to the whole.
 - *Evaluating*: This involves proposing explanations for events or issues and making overall judgements based on the evidence.
 - *Communicating and reflecting*: This involves presenting findings or representing information using an appropriate format to suit a particular audience. The appropriate use of Economics and Business terminology is very important in this.

5.7.2 Key terms

allocate assign resources to different uses within the economy

business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit

economic scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them

economic system a way of organising the production and distribution of the nation's goods, services and incomes

economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants

economy a system established to determine what to produce, how to produce and to whom production will be distributed

entrepreneur a person who sets up a business or businesses, taking on financial risks in the hope of profit

economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives

interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other

market the place where goods, services or resources are exchanged between buyers and sellers

market capitalist economy an economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses

needs goods or services that consumers consider necessary to maintain their standard of living

opportunity cost the next best alternative given up whenever a choice is made

resources items of value that we use to produce goods and services to satisfy needs and wants, which include land, labour, capital and enterprise

resource allocation relates to decisions about how scarce resources are distributed among producers, and which types of goods and services will be produced to satisfy wants and needs

specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources

wants goods or services that are desired in order to provide satisfaction to the user, but which are not necessary for survival or to meet the basic standard of living in a community

5.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the Inquiry question posed in the Overview.

How do individuals and businesses in Australia plan and budget to achieve financial goals while ensuring consumer rights and responsibilities are upheld?

1. Now that you have completed this topic, what is your view on the questions? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to one of the inquiry questions, outlining your views.

learn on

 **eWorkbooks** Customisable worksheets for this topic
Reflection

 **Digital document** Key terms glossary

5.7 Review exercise

Learning pathways

■ LEVEL 1

3, 5, 6, 7, 14

■ LEVEL 2

1, 2, 8, 9, 11

■ LEVEL 3

4, 10, 12, 13, 15

REMEMBER AND UNDERSTAND

1. From the following, identify an essential aspect of investigating economic trends.
 - A. Ignoring outliers in data
 - B. Collecting relevant data from multiple sources
 - C. Using anecdotal evidence
 - D. Relying solely on historical data
2. When interpreting a graph, select the most important factor you need to identify to answer a question.
 - A. The colours used in the graph
 - B. The scale of the vertical axis
 - C. The titles of the graph
 - D. The patterns and trends in the data
3. What does analysing data enable you to do?
 - A. Ignore the implications
 - B. Understand the underlying trends in the information
 - C. Avoid making decisions
 - D. Focus on irrelevant details
4. Which of the following is a key component of evaluating economic information?
 - A. Making decisions without considering alternatives
 - B. Using personal bias
 - C. Considering how valid and reliable the data is
 - D. Ignoring external factors
5. Why is interpreting information an important step in economic analysis?
 - A. It helps to identify the main features or ideas.
 - B. It ignores the data collected.
 - C. It creates confusion.
 - D. All of the above
6. Identify which of the following best describes questioning and researching skill.
 - A. Ignoring all alternatives
 - B. Locating relevant and detailed information
 - C. Making random choices
 - D. Relying on your gut feeling
7. Identify a crucial aspect of communicating economic findings.
 - A. Using information that contains complicated key terms
 - B. Presenting data clearly and concisely
 - C. Hiding complicated information
 - D. Making unsupported claims
8. Identify the most effective method for analysing economic data.
 - A. Ignoring context
 - B. Considering historical and current trends
 - C. Relying on assumptions
 - D. Focusing only on numerical data
9. How should conclusions be drawn from economic data?
 - A. Based on personal opinions
 - B. By analysing the data thoroughly
 - C. Through random guesses
 - D. Without considering data accuracy



10. What is the purpose of evaluating economic data?
- A. To summarise the overall findings
 - B. To draw evidence-based conclusions
 - C. To try to understand the reasons for something
 - D. All of the above

ANALYSE AND APPLY

11. **Describe** one right and one responsibility of consumers in Australia.
12. **Explain** how businesses can make decisions about what to produce.
13. **Explain** how changes in the economy, such as shifts in demand affect business strategies.

EVALUATE AND COMMUNICATE

14. **Explain** why it is important for individuals to have a plan for short- and long-term financial goals.
12. **Discuss** how the government can affect the decisions we make as individuals in society.

Answers and sample responses for this topic are available online.

6 Australia's mixed market economy

LESSON SEQUENCE

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LESSON 6.1 Overview

INQUIRY QUESTION

How do consumers, businesses and the government work together in Australia's economy to decide what is made and who it is for?

Australia has a mixed market economy, which means businesses and the government both help make economic decisions. Markets help decide what goods and services are made, how they are made, and who gets them. These choices are based on supply and demand — what people want to buy and what businesses can offer.

The government collects taxes from people and businesses to help pay for things like schools, hospitals and roads. Sometimes, the government also provides important services that businesses do not provide enough of on their own. This helps make sure everyone in the community gets what they need.

learn on

-  **Pre-test**
Online pre-test
-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital documents**
Key terms glossary
-  **Video eLesson**
Development of the market economy



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

LESSON 6.2 The key economic questions

LEARNING INTENTION

By the end of this lesson you should be able to **identify** the key questions an economy tries to answer.

Tune in

You've just discovered a new island and are in charge of setting up the economy. You have limited resources and must decide how to meet the needs of your new community. Discuss:

1. **What goods and services will you produce?**
2. **How will you produce them (e.g. by hand, with machines, using workers)?**
3. **Who will get the goods and services?**
4. **How much of each thing will you produce?**

These four questions help us as a society allocate resources to satisfy as many needs and wants as possible.

FIGURE 1 When there are limited resources, what will you decide to produce?



6.2.1 The key economic questions

The aim of any economy is to provide goods and services to consumers in the most efficient way possible. To do this, the economy has to answer these basic questions:

- *What to produce?* What goods and services will the economy produce? Will we produce cars or clothes, railway systems or roads and bridges? Businesses choose based on what consumers want and will buy.
- *How to produce?* What methods of production will businesses use to produce the goods and services we want? Businesses can use machines, workers or both. They can get materials from local suppliers or overseas.
- *Which consumers to produce for?* Businesses need to decide which consumers will be able to buy the goods and services. The price of a good or service depends on consumer income, demand and the business's profit goals. Just as the economy as a whole and businesses need to make choices, so too do consumers. This is because most consumers have some limit to their income.
- *How much to produce?* Businesses must work out the correct quantity of goods or services to produce, balancing supply and demand to avoid too much or too little.

Because the Australian economy operates largely as a market system, we would expect the interaction between buyers and sellers in a variety of different markets to answer these questions.

6.2.2 What to produce?

How does our market system help producers decide what goods and services to supply and in what quantities? The market operates by trial and error. Producers make goods available to consumers, hoping to satisfy their needs. If the goods fail to sell, the producer may go out of business. The market determines which businesses are likely to be successful. Factors that influence markets include:

- Established habits and experience — Producers know from existing behaviour that there will be demand for certain types of goods or services, like food or cafes.
- Changing tastes and preferences — Over time, consumer preferences change, affecting business success, like the increase in demand for healthy food products.
- Marketing and advertising — Businesses need to ensure consumers are aware of their products. Television, newspaper, radio and online advertising are methods used.
- Technological change — New technology attracts buyers quickly, like the release of a new mobile phone.

FIGURE 2 Improvements in technology soon attract consumers.



SkillBuilder discussion

Questioning and researching

1. What are some examples of new technologies that attract customers?
2. How do new technologies change what customers expect and how companies compete?
3. Are there long-term effects of always improving technology on the market?

6.2.3 How to produce?

Producing goods and services involves **labour**, equipment and raw materials. These **inputs** vary across production processes. For example, a bakery needs flour, ovens and bakers, while a car manufacturer needs steel, robotics and engineers. Businesses make decisions about production methods influenced by market operation. When one business in a particular market is able to cut costs by changing its methods of production, other businesses in the same market will usually make changes also, to remain competitive. Profit is also a motive: producers will aim to keep costs low to maximise profits.

Competition means businesses try to keep costs low, using efficient new equipment and automated production lines to save wages and remain competitive.

SkillBuilder discussion

Analysing

1. Why do businesses try to keep costs low when competing?
2. What are some ways businesses lower costs to stay competitive?
3. What are the risks and benefits of businesses cutting costs in a very competitive market?

FIGURE 3 The use of robotics has changed the way manufacturers produce goods.



6.2.4 For whom to produce?

Businesses must think about their market. For example, luxury car manufacturers target people with high incomes, while average-priced cars are available for people with lower incomes. Household incomes come from wages, government welfare, investments and more. **Disposable income** is the money available to spend after taxes and essentials. This amount varies based on employment, economic conditions and social policies. Understanding disposable income helps businesses determine their target market.

Skillbuilder discussion

Evaluating

1. Why is it important for businesses to know their market?
2. How do different income levels affect what businesses sell?
3. How does disposable income affect how businesses plan?

FIGURE 4 Luxury motor vehicles cost much more to produce, but the manufacturers are not attempting to sell to the mass market.



6.2.5 How much to produce?

Balancing supply and demand is crucial. Producers must decide how much to make to meet consumer needs without overproducing. Market forces influence these decisions. For example, if a product becomes scarce, its price might rise, encouraging more production. Different income levels ensure businesses provide cheaper alternatives and premium products. If producers don't produce enough they can lose out on profit. If they produce too much they will have wasted resources and lost profit.

6.2.6 Market forces and the allocation of resources

Businesses seek profits by finding markets or opportunities. Circumstances like overseas issues, societal changes and weather conditions influence resource allocation.

SkillBuilder discussion

Analysing

1. What are market forces, and how do they affect resource allocation?
2. How do things like weather and social changes affect resource allocation in businesses?
3. How do market forces affect resource allocation during economic tough times?

FIGURE 5 Fuel prices rose due to the Ukraine war.



Examples include:

- The start of the war in Ukraine in 2022 increased gas prices and made alternatives like solar panels a viable option for businesses.
- Car manufacturers are shifting resources to produce electric cars due to growing environmental concerns.
- Weather conditions in Australia during 2021 and 2022 caused shortages and price increases for certain produce, providing opportunities for farmers.

Other businesses are able to take advantage of the type of product they sell:

- Staples, such as bread and milk, are everyday items and consumers purchase these items, if not daily, then multiple times per week. The constant demand for these items guarantees relatively low prices and consistent supply.
- Premium brands sell at higher prices. For instance, Ferrari uses higher-quality materials and more complex engineering, allowing it to sell at a premium price. Brand recognition also plays a role; Nike or Adidas sell because of their logos, not necessarily superior quality.

Businesses also identify gaps in markets, such as food delivery services like DoorDash or Uber Eats, fulfilling unmet needs.

6.2 SkillBuilder activity ANALYSING

In a fruit and vegetable market, sellers change their prices regularly. The sellers naturally like to sell their bananas at a higher price.

- Suggest** one reason why the sellers of bananas would like to sell them at a higher price.
- Suggest** one reason why the sellers may reduce the price of the bananas.
- Concerning price, what is the main priority for the business and what is the main priority for the consumer?
- Your response to part **c** helps to explain the two forces of supply and demand, and how the market settles on a price. **Explain** the concept of how the market determines the prices of goods and services.



6.2 Exercise

learnon

Learning Pathway

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 7, 9

■ LEVEL 3

6, 8

REMEMBER AND UNDERSTAND

- What is the meaning of *disposable income*?
 - The difference between the wholesale and retail price
 - The amount of money an individual earns per year
 - The amount of money a household has to spend
 - The amount of money an individual earns per week
- True or false? The decreased use of technology in production techniques is one of the key ways in which businesses keep their production costs low.
- Identify the three different types of inputs that go into any production process.
 - Money, equipment and raw materials
 - Labour, equipment and raw materials
 - Labour, money and water
 - Money, water and electricity
- Explain** two factors that could influence which goods and services businesses decide to produce.

ANALYSE AND APPLY

5. **Explain** how markets can influence to whom different goods and services are distributed.
6. **Explain** the meanings of the four economic questions.
7. **Describe** two methods that can impact how businesses produce goods.

EVALUATE AND COMMUNICATE

8. **Explain** why luxury goods, such as expensive cars, are still popular despite there being many other cheaper options available.
9. Imagine you own a homemade ice-cream shop in a coastal town. **Predict** what will happen to buyer preferences in the following scenarios:
 - a. The market price of cream rises, raising the cost of producing ice cream.
 - b. A new ice-cream shop opens a couple of doors down.
 - c. Your town experiences an unusually cold summer.

LESSON 6.3 Demand and supply in the market

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the laws of demand and supply and the interaction between consumers and businesses.

Tune in

The year 2024 saw Taylor Swift tour Australia. She played a number of concerts around Australia with tickets selling for as much as \$1249.90 for VIP tickets, \$379.90 for A Reserve tickets and as little as \$75.90 for seats with an obstructed view.

FIGURE 1 How much would you pay?



1. How was Taylor Swift able to charge these prices and sell out three concerts at the MCG, with each concert holding over 96 000 fans?
2. As a class, discuss why you think prices vary, how ticket sellers determine what price to charge and how much your classmates and you would pay for tickets.
3. Is there another artist you would pay more for a ticket to their show?

6.3.1 Demand

The law of **demand** simply states that the quantity of a particular good or service that consumers are prepared to buy is dependent on the price being charged, assuming other factors do not change. Hence:

- As the price increases, there is a reduction in the quantity demanded.
- As the price decreases, there is an increase in the quantity demanded.

This relationship can be shown on a diagram known as the demand curve. This curve will show that as the price falls, the demand for a product will increase as more people can afford the product. The opposite will also be true.

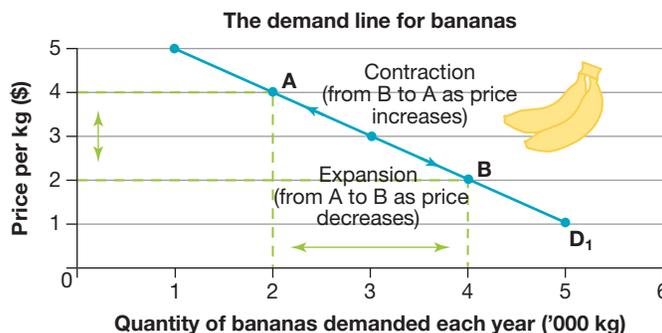
SkillBuilder discussion

Analysing

1. Study **FIGURE 2**. As a consumer, which price would you prefer to pay for bananas?
2. Explain what happens to demand as the price rises.
3. Can you provide another example that shows the same relationship between price and demand?

FIGURE 2 The demand line shows the law of demand for bananas, where the quantity demanded varies inversely with price.

Price per kg of bananas	D_1 = Original quantity of bananas demanded each year ('000 kg)
\$1	5
\$2	4
\$3	3
\$4	2
\$5	1



6.3.2 Supply

The law of **supply** simply states that the quantity of a particular good or service that sellers are prepared to sell (or supply) is dependent upon the price they will receive for their good or service, assuming other factors do not change. Hence:

- As the price increases, there is an increase in the quantity supplied.
- As the price decreases, there is a reduction in the quantity supplied.

This relationship can be shown on a diagram known as a supply curve. This curve will show that as the price falls, the supply of a product will decrease as suppliers hope to gain a higher price for the product by making it scarce. The opposite will also be true as suppliers will want to supply as much of the product as possible at the highest price possible to maximise their profits.

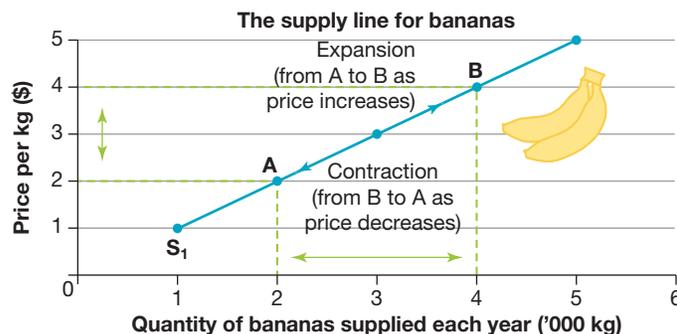
SkillBuilder discussion

Analysing

1. Study **FIGURE 3**. As a producer, which price would you prefer to sell your bananas for?
2. Explain what happens to the supply of bananas as price rises.
3. Can you provide another example that shows the same relationship between price and supply?

FIGURE 3 The supply line shows the law of supply for bananas, where the quantity supplied varies directly with price.

Price per kg of bananas	S_1 = Original quantity of bananas supplied each year ('000 kg)
\$1	1
\$2	2
\$3	3
\$4	4
\$5	5



6.3.3 Equilibrium

The laws of demand and supply are straightforward but it is important to remember that consumers and businesses don't operate in isolation — consumers need businesses to supply goods and services for them to buy, and businesses need consumers to buy the products they supply.

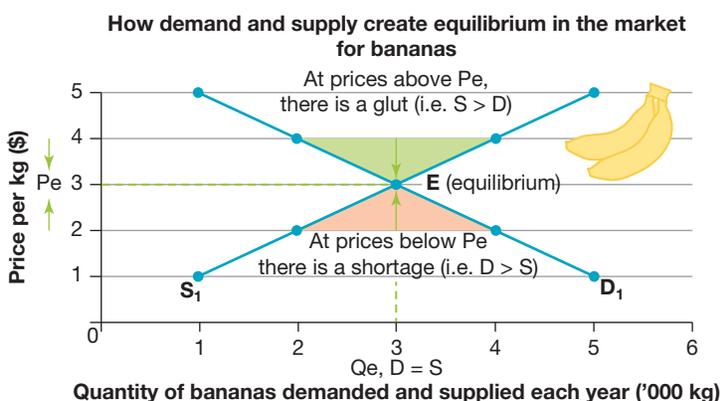
As both buyers and sellers want different things from the market, they often need to negotiate to come up with a price for a product that both consumers and suppliers are happy with. This is called the **equilibrium** price. In a diagram, it is the point where the demand curve and the supply curve intersect.

The equilibrium point is where consumers and suppliers agree on a price and a quantity that will be traded. As a result there is no shortage of products and no surplus of products, and both parties are satisfied.

Using our banana example, the equilibrium price and equilibrium quantity can be seen in **FIGURE 4**.

FIGURE 4 A demand–supply (D–S) graph shows how the free operation of market forces determines the equilibrium price of bananas.

Price per kg of bananas	D_1 = Original quantity of bananas demanded each year ('000 kg)	S_1 = Original quantity of bananas supplied each year ('000 kg)
\$1	5	1
\$2	4	2
\$3	3	3
\$4	2	4
\$5	1	5



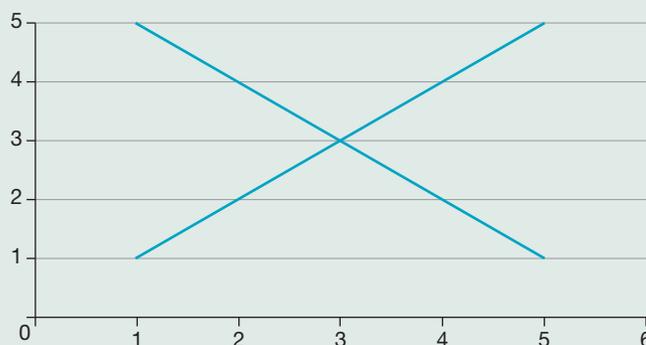
6.3 SkillBuilder activity ANALYSING

Each product has a different set of conditions that impact that market. While the general rules for demand and supply do operate, sometimes individual markets have their own special set of circumstances that impact the demand and/or supply of the products in that market.

For each of the following scenarios, use the demand-and-supply curve diagram below to draw new curves to reflect the changes in demand and/or supply. For each graph, explain what has happened and the effect on demand and/or supply.

- The effect of a heatwave on the market for plastic swimming pools
- The effect on the market for iPhone 15 of the announcement of the release of iPhone 16
- The effect of improved technology for electric vehicles on the market for petrol-driven cars
- The effect on the market for energy drinks of a government ban on their sale to people under 18 years of age

FIGURE 5 The demand-and-supply curve



Learning pathways

■ LEVEL 1

1, 2, 3, 4, 5

■ LEVEL 2

7, 8, 9

■ LEVEL 3

6, 10

REMEMBER AND UNDERSTAND

1. A market is where buyers and sellers _____ and _____ money for goods and services.
2. **State** the law of demand.
3. **State** the name of the point where demand and supply intersect on a graph.
4. **State** the law of supply.
5. **State** the factor that both the law of demand and the law of supply have in common.

ANALYSE AND APPLY

6. **Explain** why there is no surplus or shortage when a market is at equilibrium.
7. **Explain** the impact of a prolonged drought on the market for lettuce.
8. **Explain** the likely impact of a cut in income tax by the government on the jewellery market.

EVALUATE AND COMMUNICATE

9. **Define** the term *equilibrium* and **discuss** how it works.
10. **Discuss** the concept that non-price factors have more impact than price on the demand for clothes.

Answers and sample responses for this topic are available online.

LESSON 6.4 The Australian taxation system

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the Australian taxation system and how taxation revenue is used.

Tune in

Paying taxes isn't necessarily the most rewarding thing about working, but our taxation system does have many benefits for our society.

1. **Mind-map reasons why taxes are important in our economy.**
2. **Develop a list of services and/or products we may not have if there were no taxes to be paid.**

FIGURE 1 The phrase 'in this world, nothing is certain except death and taxes' signifies that it is inescapable that we will all be required to pay taxes.



6.4.1 Australia's system of taxation

Tax is a term used to describe a compulsory financial charge or some other type of levy imposed on an individual, household or business by a government body in order to fund government spending. In Australia, taxation is primarily monitored by the Australian Taxation Office (ATO).

The Australian government and the individual state and territory governments impose a variety of taxes on individuals, households and businesses.

Our tax system can be looked at in a variety of ways.

Direct and indirect taxation

Direct taxation refers to any tax that falls directly on the taxpayer — for example, income tax, company tax or licence fees. The tax is levied on the income of the individual or business and paid directly by the business.

Indirect taxation refers to any tax that is passed on to other tax payers — for example, Goods and Services Tax (GST), sales taxes, import duties. GST is paid by businesses but is passed on to consumers who pay the tax when they buy goods or services. The businesses (sellers) then collect it and pass the tax on to the ATO.

Rate of taxation

The tax brackets used by the Australian Taxation Office give us a guide as to how we are taxed on our own wages or salaries. **TABLE 1** shows the taxable income 'brackets' and how much, in dollars and cents, a person will pay in tax on this income.

Australia uses a **progressive tax system**, which means that people who earn more money pay a higher percentage of their income in tax. This helps make the system fair, so that those who can afford to pay more do so.

In contrast, a proportional tax system is when everyone pays the same percentage of their income, no matter how much they earn. A regressive tax is the opposite of progressive: it takes a larger percentage of income from people who earn less, which can make it harder for low-income earners. Progressive taxes aim to reduce inequality by helping fund services like healthcare, education and transport for everyone.

SkillBuilder discussion

Analysing

1. Study the information in **TABLE 1**. What taxable income bracket do you think most people are in?
2. What happens to the rate of tax that you pay as you earn more?
3. Given everything that you know so far, do you think that the tax system is fair?

TABLE 1 The tax brackets used by the ATO

Resident tax rates 2024–25	
Taxable income	Tax on this income
0–\$18 200	Nil
\$18 201–\$45 000	16c for each \$1 over \$18 200
\$45 001–\$135 000	\$4288 plus 30c for each \$1 over \$45 000
\$135 001–\$190 000	\$31 288 plus 37c for each \$1 over \$135 000
\$190 001 and over	\$51 638 plus 45c for each \$1 over \$190 000

Source: <https://www.superguide.com.au/how-super-works/income-tax-rates-brackets>

Note: in **TABLE 1** the tax free threshold applies to everyone. So even if someone earns \$1 000 000 per annum they still pay no tax on their first \$18 200.

6.4.2 The purpose of Australia's system of taxation

The main aim of the Australian government's taxation policy is to improve the fairness of the distribution of income among individuals and households. The government has three main roles in imposing taxes on individuals, households and businesses — distribution, allocation and production.

Distribution

The distribution of income is a government goal. It tries to reduce the gap between the rich and the poor by taxing high-income earners more than low-income earners and redistributing some of that income. The government will then use this collected taxation to redistribute income to low-income earners or those without any income through transfer payments (welfare, such as the JobSeeker Payment).

Allocation and production

The system of taxation adopted by the government can also be used to allocate resources. In a way, this means redistributing resources in society to make it more equitable for everyone. The government uses the income that it receives to spend on the provision of goods and services which are sometimes not produced by businesses.

These services are available to all and are often free or provided at a very low cost. These services include public parks, street lighting, police and emergency services, defence and other such services.

FIGURE 2 Taxes are used for resources such as emergency services.



The government can influence consumer behaviour through the tax system. Rebates, such as the WA Residential Battery Scheme, reduce item costs to encourage purchases, which aims to reduce energy demand from the grid and so reduce carbon emissions. A rebate is a form of partial refund. Conversely, excise duties are taxes on items like tobacco and alcohol that discourage the use of such products.

Public schools, hospitals and transportation are funded to ensure they remain affordable and accessible to all consumers. Tax revenue is also used to provide goods and services for low-income earners.

6.4.3 Government spending and receipts

Governments plan their spending in a yearly **budget**. The budget tries to keep our economy in a stable position, keeping a balance between supporting growth and avoiding the negative impacts of it. Budgets are two-sided: the Australian government's budget consists of what it will spend and also what it will earn.

The government earns money from a variety of sources, but a big part of this is from taxing incomes. Sometimes a government spends more than it earns, which is known as a deficit or government debt. At other times, a government spends less than it earns; this is called a surplus.

The government's budget for 2023–24 onwards is shown in **TABLE 2**, with the government having a deficit of \$28.3 billion in 2024–25 — an increase from the previous year, with the plan to reduce the deficit over the coming years.

TABLE 2 The government's budget for 2023–24 and beyond

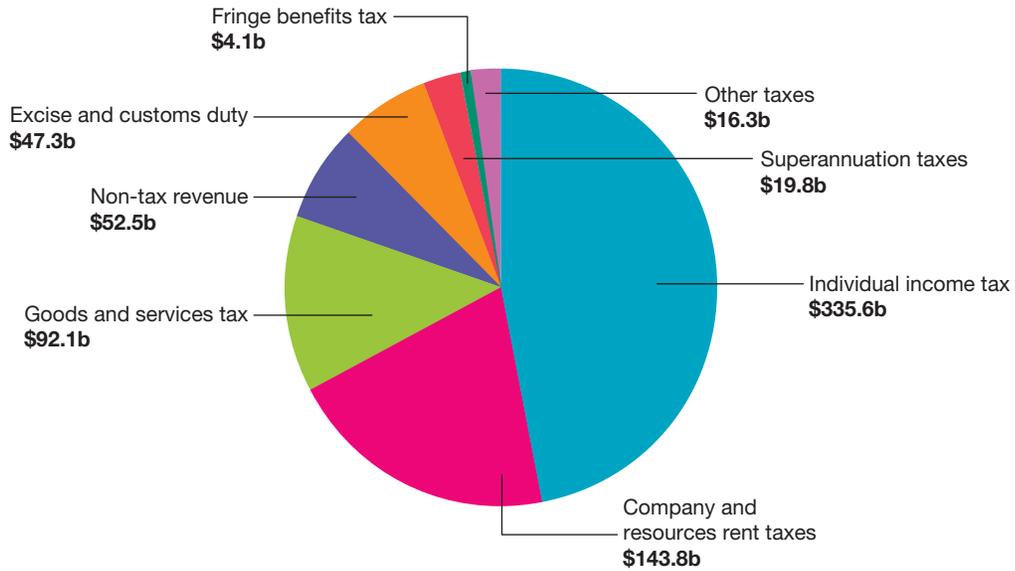
	Estimates				
	2023–24 \$b	2024–25 \$b	2025–26 \$b	2026–27 \$b	2027–28 \$b
Receipts	692.3	698.4	719.4	760.0	801.8
Payments	683.0	726.7	762.2	786.7	826.2
Net operating balance	9.3	-28.3	-42.8	-26.7	-24.3

The graphs in **FIGURE 3** show where the receipts are coming from and where the payments are being made.

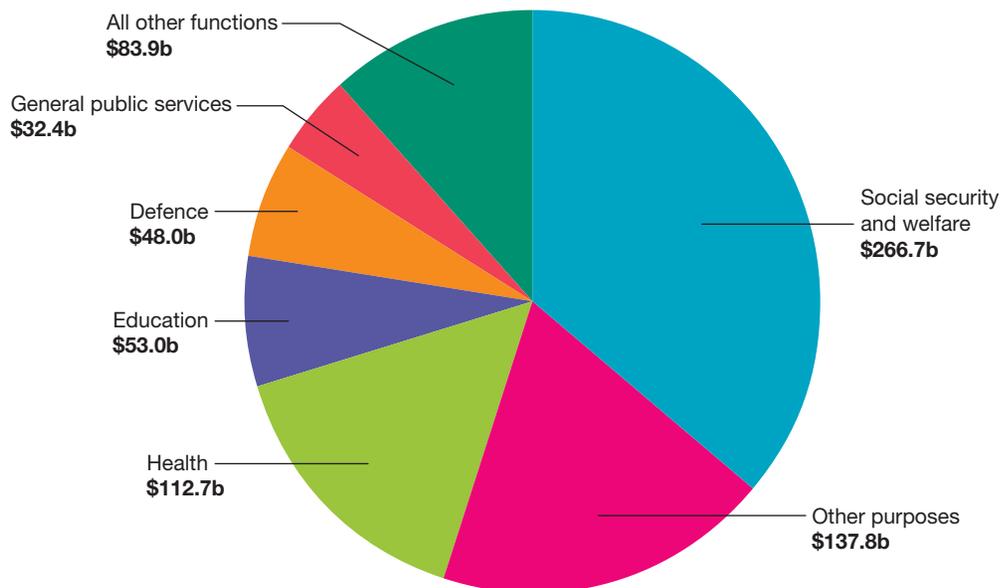
FIGURE 3 Revenue and spending 2024–25

Total revenue for 2024–25 is expected to be \$711.5 billion.
Total expenses are expected to be \$734.5 billion.

Where revenue comes from (2024–25)



Where government spending is directed (2024–25)



6.4.4 Taxes that young people pay

Goods and Services Tax

Young people or full-time secondary school students probably don't think about paying tax. However, everyone in Australia will pay some tax each year, the most common being the Goods and Services Tax (GST). This is a tax applied to most goods, services and other items sold or consumed in Australia. GST is a regressive tax, because as a proportion of income, it affects lower-income earners more.

While most food and drink are GST-free, there are some exceptions to this rule, so students in junior and middle secondary school will pay some GST. These items include:

- chewing gum
- potato chips
- dim sims
- doughnuts
- energy drinks.

GST is also paid by young people when they buy clothes and sporting goods, or go out to places such as the cinema or a bowling alley.

Income tax

Most people under the age of 18 won't pay income tax. All persons earning an income from work are eligible for the tax-free threshold. This is an amount of income a person can earn that does not incur income tax. In 2024–2025 this figure was \$18 200.

Most secondary school students who have a part-time job will not earn this amount of money in a year and therefore won't pay income tax.

If a person is under 18, has left full-time schooling and works full-time, they will be subject to income tax like other full-time workers. To pay income tax, a person must have a tax file number (TFN). A TFN is a personal reference number in the tax and superannuation systems. It is an important part of tax and super records and one's identity, so it should be kept secure. Each person retains their TFN for life, even if they change their name, jobs, move interstate, or go overseas.

People are not required to have a TFN, but without one, they will pay more tax. Additionally, they won't be able to apply for government benefits, lodge a tax return electronically, or get an Australian business number (ABN).

Most secondary school students apply for a TFN when they gain their first part-time job or undertake work experience in Year 10.

FIGURE 4 Most students with a casual or part-time job will not earn enough to pay income tax.



6.4 SkillBuilder activity ANALYSING

Australia uses a progressive income tax system known as the pay-as-you-go (PAYG) system. The system groups income earners into tax brackets based on their incomes. The tax brackets in 2024 were shown in

TABLE 1 in section 6.4.1.

1. The following people have asked you to **determine** how much tax they will pay using these tax brackets. Calculate the amount of tax payable for each person.

Person	Income	Person	Income
Adam	\$ 35 800	Josh	\$ 12 700
Anil	\$132 500	Megan	\$350 000
Feng	\$ 89 200	Dev	\$231 600
Claire	\$157 400	Kaan	\$800 000

2. **Explain** to Kaan and Megan why they pay more tax than others in the group. Ensure you use the information you learned in this lesson in your explanation. Try to keep it simple.

6.4 Exercise

learn**on**

Learning pathways

■ LEVEL 1

2, 3, 4

■ LEVEL 2

1, 5, 6, 8

■ LEVEL 3

7, 9, 10

REMEMBER AND UNDERSTAND

- True or false? Excise duty is only paid by businesses, not by individuals.
- Identify what GST stands for.
 - Government Services Tax
 - Government Spending Tax
 - Goods and Spending Tax
 - Goods and Services Tax
- Identify two products that have an excise duty imposed upon them.
 - Fruit
 - Alcohol
 - Clothing
 - Homewares
 - Tobacco
- State** three purposes of Australia's tax system.
- Identify** the two types of taxes used by the government.

ANALYSE AND APPLY

- Explain** what is meant by *progressive tax system*.
- Explain** what is meant by *rebate* and how it can influence consumer spending.

EVALUATE AND COMMUNICATE

- Explain** why it is important for the government to redistribute income through taxation. **Justify** your response.
- Explain** why the government needs to use some taxation revenue to produce goods and services.
- Explain** the concept of a budget deficit and why you think it may be necessary for a government to plan for a deficit.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the different roles played by the government in the economy.

Tune in

Most of us have heard of some or all of the following government agencies:

- Reserve Bank of Australia (RBA)
- Australian Taxation Office (ATO)
- Medicare
- Centrelink.

They are official government bodies that assist consumers and businesses to manage their interaction in the economy.

1. **Mind-map what you think are the main functions of each of these institutions.**
2. **Discuss why we need these institutions.**

FIGURE 1 Centrelink and Medicare are two important Australian government agencies.

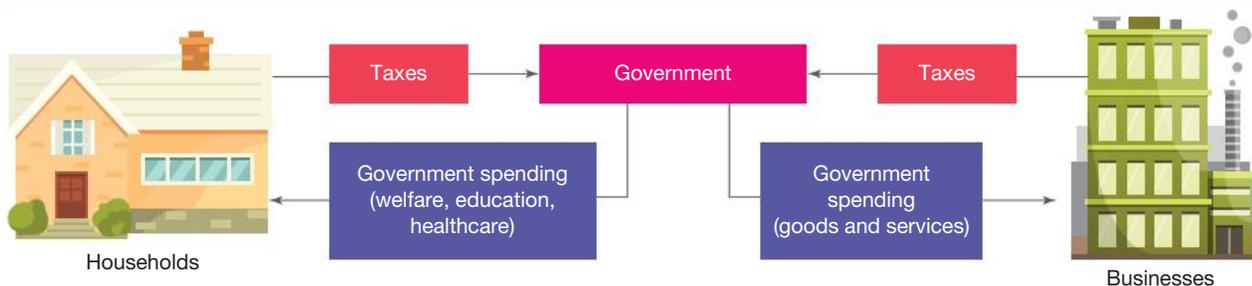


6.5.1 Role of the government

The involvement of government in our market system is illustrated by **FIGURE 2**. We can see that both households and businesses pay taxes to government.

Some of this money comes back to households in the form of welfare payments such as pensions, or as services such as education and healthcare. Some of it is spent on buying goods and services from businesses, or paying businesses to build roads, schools or hospitals.

FIGURE 2 Model showing the role of the government in the flow of money, goods and services between households and businesses



SkillBuilder discussion

Analysing

1. Study the diagram in **FIGURE 2**. Discuss the role of the government.
2. Why is the government placed in the centre of the diagram, between the businesses and households?
3. What is the link between taxes and government spending?

Sometimes, the market does not provide enough of a good or service. This usually happens when it is not profitable for a business to provide it to everyone. When this happens, the government steps in to help. It does this by either providing the service directly or helping to fund it so that more people can access it. These goods and services are important for the health, safety and wellbeing of society.

6.5.2 Welfare

The government provides financial and other support to disadvantaged members of the community. The Age Pension supports those who are beyond retirement age and no longer working. **Unemployment benefits** are designed to support those who cannot find work. The National Disability Insurance Scheme (NDIS) provides people with a permanent and significant disability with money to access support and services.

Not only are welfare payments designed to provide fairness and support to those who need help, but the payments can also have a positive economic effect on markets. Those receiving welfare are likely to spend most of their money, so their spending adds to the circular flow of income throughout the economy. Businesses gain revenue from selling additional goods and services. This, in turn, allows them to employ more people, who also spend their money buying goods and services.

FIGURE 3 Welfare payments help those who are not able to earn an income.



6.5.3 Transport

The government is responsible for providing **infrastructure** like roads, railways and ports. These are crucial for transporting goods from manufacturers to shops. Without this government infrastructure, businesses could not operate.

- Public transport systems such as buses, trains and trams help people get to work, school and other places. These systems are very expensive to build and run. If only private companies were responsible for transport, they might charge high prices or only run services in areas where they can make money. The government steps in to provide or fund transport, ensuring that people in regional or low-income areas can get around. This makes it easier for everyone to participate in the economy and community.
- Ports are needed for importing and exporting goods and moving them within Australia. Tasmania relies on shipping across Bass Strait to receive goods from the mainland and to send its products to other states.
- Governments fund and maintain public roads across the country, including remote and regional areas, so that everyone can travel, trade and access services. This helps farmers, businesses and families participate in the economy and stay connected to their communities.

6.5.4 Infrastructure

- The government provides a postal service that supports correspondence between businesses, as well as the delivery of goods through a parcel delivery service.
- The telephone service was originally provided by government before Telstra was **privatised** and other providers were allowed to enter the market. Even today, the national broadband network is an important infrastructure project being funded by the government. Markets cannot operate without efficient systems of communication between consumers and businesses.

- Traditionally, energy supplies such as electricity and gas have also been provided by government. These are not only essential for the domestic uses we are all accustomed to, but also for the functioning of businesses. In some states of Australia, electricity and gas supplies have been privatised and are now run by businesses rather than by the government. Even where this has occurred, the original infrastructure was usually built by the government before being sold to the business sector.

SkillBuilder discussion

Questioning and researching

1. What problems might occur when essential industries, such as electricity and gas supplies, are privatised?
2. Do you think these essential businesses should be private or government owned?

FIGURE 4 Government provides infrastructure to enable markets to function more efficiently.



6.5.5 Education

Education helps people gain knowledge and skills so they can work, earn a living and contribute to society. Without government support, only wealthy families might be able to afford to send their children to school. In Australia, the government provides free public education from primary school through to high school. It also helps fund universities and training programs. This means more people have the chance to get a good education, which helps create a fairer and more skilled society.

6.5.6 Healthcare

Going to the doctor or hospital can be very expensive. If only private businesses offered healthcare, many people would not be able to afford it. That's why the Australian government helps provide healthcare through Medicare. This means that all Australians can visit the doctor or hospital when they need to, without worrying about the cost. The government uses the money it collects from taxes to pay for this. It also funds public hospitals, ambulance services and programs that help people stay healthy.

FIGURE 5 It is a responsibility of governments to provide hospitals and health services.



SkillBuilder discussion

Evaluating

1. Now that you have a sense of what the government does, discuss how important the government is. Do we need a government to provide us with goods and services?
2. Do you know of any countries where the government doesn't provide goods and services? Or do you know of any countries where the government provides most things?

6.5 SkillBuilder activity ANALYSING, EVALUATING

1. **Discuss** the three government-provided services of healthcare, education and transport.
 - Why might a business not want to provide this service?
 - What could happen if the government didn't help?
2. **a. Examine** the list of goods/services below:
 - Public hospitals
 - Private gyms
 - High school education
 - Bus services in a small town
 - Mobile phones
 - Internet access in remote areas
 - Vaccination programs
 - Roads and highways**b.** For each item, **state** who should provide it: government, business, or both.
3. **Explain** your answer to part **b** from the previous question, using the following prompts:
 - a. Is it essential for everyone?
 - b. Would it be profitable for a business to provide fairly?
 - c. What might happen if people couldn't access it?Share your responses.
4. Write a short paragraph **analysing** one item from the list in question 2, **explaining** your judgement using key economic terms.

6.5 Exercise

learn on

Learning pathways

■ LEVEL 1

1, 2, 4

■ LEVEL 2

3, 5, 6

■ LEVEL 3

7, 8, 9

REMEMBER AND UNDERSTAND

1. Explain why the Australian government provides healthcare through Medicare.
 - A. To make doctors richer
 - B. To increase taxes
 - C. To make healthcare free for everyone
 - D. To help all Australians access affordable medical care
2. Identify one reason the government provides public education.
 - A. So schools can make a profit
 - B. To give every student a fair chance to learn
 - C. To reduce the number of schools
 - D. To make students leave school early
3. True or false? The government only provides goods and services when it wants to make a profit.

4. What happens when a service provided by the government is privatised?
 - A. The government gains the majority of its influence over how this service is run.
 - B. The private company loses the majority of its influence over how this service is run.
 - C. The government loses the majority of its influence over how this service is run.
 - D. None of the above
5. **Explain** why the government usually must provide funding for public transport to operate.

ANALYSE AND APPLY

6. **Explain** why businesses might choose not to provide services like public hospitals or free schooling on their own, and how this affects people in the community.
7. **Explain** how government involvement in transport helps support the economy.

EVALUATE AND COMMUNICATE

8. **Evaluate** whether it is fair that the government uses tax money to fund services like healthcare, education and transport. **Explain** your answer.
9. Imagine the government stopped funding public schools. **Explain** what might be the long-term effects on individuals and the country.

Answers and sample responses for this topic are available online.

LESSON 6.6 Inquiry: How would you tax the Australian public?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the process involved in developing a tax system.

Background

In reading and discussing the material in this topic, you should now have an understanding of Australia's taxation system. Each year it is the responsibility of the Treasurer (a government minister) to prepare Australia's budget. The Treasurer determines how much money the government will raise through taxation — and whether to raise or lower taxes, introduce new taxes or abolish a tax. The Treasurer also determines what the money will be spent on and in what amounts.

Your task is to consider how you might tax the Australian public and how you might allocate the tax raised.

FIGURE 1 The Hon Dr Jim Chalmers MP was sworn in to the role of Treasurer on 23 May 2022.



Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

Investigate the current tax system to work out some of the tax types and rates.

Step 2: Analysing

Analyse the information you found and **consider** how fair you think it is.

Step 3: Evaluating

Decide on your own version of a tax system for Australia — **consider** the types of taxes and the rate.

Allocate spending of the money that you will raise through your tax system — use percentages (such as 10 per cent of revenue on healthcare). Be prepared to **justify** your choices if asked.

Step 4: Communicating and reflecting

Communicate your new tax system in a visual way. You might **create** a poster containing infographics or a PowerPoint presentation.

LESSON 6.7 Review

6.7.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

6.2 The key economic questions

- The key economic questions that any economy must answer include what to produce, how to produce, for whom to produce and how much to produce.
- Businesses decide what to produce based on consumer demand, established habits, changing tastes, marketing and technological changes.
- The methods of production are influenced by market operations, competition, and the need to keep costs low.
- Businesses determine their target market based on consumer income levels and disposable income, which affects their purchasing power.

6.3 Demand and supply in the market

- The law of demand states that as prices rise, demand for a product will fall.
- The law of supply states that as prices rise, supply of a product will increase.
- Demand and supply of a product can be shown diagrammatically on demand curves and supply curves.
- Equilibrium is where demand and supply intersect.

6.4 The Australian taxation system

- Australia's tax system comprises numerous different types of taxes.
- Taxes can be direct or indirect.
- Taxes may be progressive, proportional or regressive.
- Taxes (rebates) can influence consumer decisions and producer behaviour.

6.5 The role of the government in the economy

- The government performs a number of roles in the Australian market system including:
 - the provision of welfare and infrastructure
 - economic management
 - regulation of wages and employment conditions
 - provision of some goods and services
 - management of planning and the environment
 - regulation of international trade
 - setting of immigration policies and targets.

6.6 Inquiry: How would you tax the Australian public?

- Many considerations need to be made when developing a fair tax system.

6.7.2 Key terms

budget estimates of all government income to be raised by taxes and other charges, and the planned spending of that income, within any given year

demand a need or want of consumers expressed by the spending of income

direct taxation a type of tax that is paid straight to the government by individuals or businesses on their income or profits. For example, income tax is a direct tax because it is taken directly from a person's earnings.

disposable income the amount of money a person has left to spend or save after paying taxes and essential expenses

equilibrium a resting point in a market where the forces of supply and demand are equally matched, and where the market is 'cleared'

indirect taxation a type of tax that is added to the price of goods and services and paid to the government by the seller. Consumers pay this tax when they buy things. For example, the Goods and Services Tax (GST) is an indirect tax included in the price of most items.

infrastructure the facilities, services and installations needed for a society to function, such as transportation and communications systems, water and power lines

inputs those things that contribute to the production process

labour the human skills and effort required to produce goods and services

privatise to sell a government-owned provider of goods or services to private investors

progressive tax system in theory, people who earn more money pay more income tax

supply a market force that relates to the quantity of a particular good or service that producers are willing to sell at a given price over a period of time

unemployment benefit a welfare payment by government to people who are unemployed and looking for work. Such payments in Australia are generally known as the JobSeeker Payment.

6.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How do consumers, businesses and the government work together in Australia's economy to decide what is made and who it is for?

Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?

learn on

-  **Post-test** Online post-test
-  **eWorkbook** Customisable worksheets for this topic
Reflection
-  **Digital document** Key terms glossary

6.7 Review exercise

Learning pathways

■ LEVEL 1

1, 3, 4, 8

■ LEVEL 2

2, 6, 7, 9, 10

■ LEVEL 3

5, 11

REMEMBER AND UNDERSTAND

1. What is the main aim of any economy?
 - A. To produce as many goods and services as possible
 - B. To provide goods and services to consumers in the most efficient way possible
 - C. To ensure all businesses make a profit
 - D. To reduce the use of technology in production

2. Which of the following factors influences the market and helps producers decide what goods and services to supply?
 - A. Established habits and experience
 - B. Changing tastes and preferences
 - C. Marketing and advertising
 - D. All of the above
3. Which of the following is not considered a part of the basic economic problem?
 - A. Lack of money
 - B. Relative scarcity
 - C. Consumer sovereignty
 - D. Opportunity cost
4. The government in Australia has an impact on markets by:
 - A. determining prices in the retail market.
 - B. controlling interest rates in the financial market.
 - C. regulating minimum wages in the labour market.
 - D. promoting capital growth on the stock market.
5. What might happen if the government didn't help provide public transport?
 - A. More people would walk.
 - B. Everyone would own a car.
 - C. Only wealthy or city-based people could afford transport.
 - D. Roads would be safer.
6. Income tax in Australia is an example of:
 - A. an indirect tax.
 - B. a proportional tax.
 - C. a progressive tax.
 - D. a regressive tax.
7. Identify the type of economy used in Australia.
 - A. Capitalist economy
 - B. Market economy
 - C. Socialist economy
 - D. Command economy
8. A business will supply more of its goods and services:
 - A. if the price that it can charge is low.
 - B. if the price that it can charge is high.
 - C. if it can supply at all price levels.
 - D. if the price paid is always the same.
9. How does public transport benefit people who live in rural or regional areas?
 - A. It provides leisure options.
 - B. It helps them travel to work, school or hospitals.
 - C. It increases the number of cars on the road.
 - D. It makes urban areas more crowded.

ANALYSE AND APPLY

10. Give one example of a health service the government helps pay for.
11. **Explain** how education funded by the government helps society as a whole.
12. **Explain** the concept of *disposable income* and its importance for businesses.

EVALUATE AND COMMUNICATE

13. **Describe** two methods that can impact how businesses produce goods.
14. **Analyse** how market forces affect resource allocation during economic tough times.

Answers and sample responses for this topic are available online.

7 Work and financial decision-making

LESSON SEQUENCE

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LESSON 7.1 Overview

INQUIRY QUESTION

How do individuals make informed decisions about work, income, spending, saving, and their rights as consumers in the Australian economy?

People work for many reasons, such as earning income, enjoying what they do, and having a sense of purpose. There are different types of work and many ways to earn money, including wages, salaries, or profits from a business.

When people make financial decisions — like buying something expensive or saving for the future — they must think about factors such as price, interest rates, and their personal goals.

In addition, both consumers and businesses in Australia have rights and responsibilities, including the right to refunds, warranties, and safe products. Learning about these rights and responsibilities helps individuals make smart, confident decisions in everyday life.

learn on

Pre-test

Online pre-test

eWorkbook

Customisable worksheets for this topic

Digital document

Key terms glossary

Video eLesson

Work and financial decision-making



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

LESSON 7.2 Why people work and how they earn money

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why people work
- **describe** the types of work people do
- **identify** the different ways to earn an income.

Tune in

Team up with a partner and mind-map the reasons that people go to work.



FIGURE 1 If you had a big lottery win, would you still work?



1. **No doubt you thought of money! What do you think are the best-paid occupations in Australia?**
2. **If you won the lottery tomorrow, would you still plan to go to work? Discuss your answer with a partner.**
3. **Write down the advantages and disadvantages of continuing to work if you won the lottery.**

7.2.1 What is work?

The Australian Bureau of Statistics says a person is 'employed' if they work for at least one hour in a week. This includes everyone from teens with part-time jobs to adults with full-time jobs.

To be considered 'unemployed', a person must not work at all, be looking for a job, and be ready to work.

7.2.2 Why do people work?

Even rich people work because there are many benefits, other than money, to having a job.

Earning an income

The main reason we work is to earn money, called a wage or salary. When someone works, they are employed. To live, we need money. Many workers try to balance work and free time, which is called **work-life balance**.

Improving living standards

Imagine your teenage cousin just got her first pay from a part-time job. She decides to buy new running shoes with her money to help her train better.

Working gives people money to buy what they need and want. This is called satisfying **material living standards**. People with high incomes can buy lots of things like designer clothes, fancy cars and overseas holidays.

But work also affects **non-material living standards**, which relate to a person's quality of life. This includes things like crime rates, health and happiness. People who work usually feel happier, although this is hard to measure. People who are employed are also less likely to commit crimes.

A sense of purpose

One important reason people work is to find a sense of purpose. In a recent survey, 200 employees of a factory were asked to write down the most important aspect of their work. The responses revealed that it was not money that was most important. Sixty-seven per cent of the employees said the most rewarding aspects were knowing they had done the job well and receiving some praise from their supervisor. When individuals have a job that they care about, it can also give their life meaning and direction. This sense of purpose can come from helping others, contributing to a team, or making a difference in the community. For example, teachers may find purpose in educating students, while doctors might feel it in saving lives. Having a job that provides a sense of purpose can make people feel valued and satisfied, knowing that their efforts are meaningful and impactful.

FIGURE 2 A cardiologist is a doctor who helps people with heart and blood vessel problems. This is one of the highest-paid jobs in Australia.



SkillBuilder discussion

Questioning and researching

1. Why is it important for workers to know they are doing their job well?
2. How can employers help workers feel appreciated for their work?
3. What are some signs that show a worker is doing a good job?

FIGURE 3 Knowing they are doing a job well is very important to many workers.



Enjoyment

Many people feel that work can make them happy. Studies show that if you enjoy your job and working with your co-workers, you'll feel happier in other parts of your life. **TABLE 1** summarises some of the non-financial and financial benefits of being employed and participating in the workforce.

TABLE 1 Some of the benefits of participating in the workforce

Non-financial benefits of participating in the workforce	Financial benefits of participating in the workforce
<ul style="list-style-type: none"> • The opportunity to use your skills and abilities in a positive way • Meeting and mixing with new people • Doing something you love and are passionate about • Increasing your self-esteem and confidence • Developing your natural strengths and talents • Being part of a group or a team at work • Having friends at work • Contributing to the Australian economy • Being happy 	<ul style="list-style-type: none"> • Earning an income • Exchanging money for goods and services • Being a consumer • Having the ability to buy what you need and want • Creating and maintaining a good standard of living for your family • Affording essentials for yourself and your family e.g., shelter, food, clothing, electricity

7.2.3 What counts as work?

Work means doing mental and physical tasks for money. When you get paid, it's called paid work, and the money you earn is called a wage or salary. But some work doesn't earn money, like cleaning your room or doing chores at home. Even though your parents might give you pocket money for chores, it's not considered income in economics. Other examples of unpaid work include family duties, schoolwork, volunteering and community service.

7.2.4 The labour force

Australia's labour force includes people who are working and those looking for jobs. This includes **full-time, part-time, casual** or **seasonal** workers. It includes people aged 15 and over who are either employed or unemployed. People who are not regarded as part of the labour force include:

- people eligible for the Age Pension
- people who have retired from the workforce
- people with a physical or mental disability that prevents them from working
- full-time students who do not work
- full-time carers who look after children or other family members
- volunteers working without pay in institutions such as the State Emergency Service and charities.

In September 2024, 4.1 per cent of the labour force in Australia was unemployed.

SkillBuilder discussion

Communicating and reflecting

1. What is the definition of the labour force?
2. Who is included in the labour force?
3. Why is it important to understand the labour force?

FIGURE 4 People who work or are looking for work are part of the labour force.



7.2.5 Types of workers

In Australia, workers are classified as full-time, part-time, permanent, casual, self-employed or seasonal. For example, a university student might choose to work part-time to balance work with studying. The main types of work are listed in **TABLE 2**.

TABLE 2 Different types of workers

Type of worker	Features
Full-time worker	<ul style="list-style-type: none">• Ongoing employment• 35 or more hours of work per week
Part-time worker	<ul style="list-style-type: none">• Ongoing employment• Fewer than 35 hours of work per week• Fixed or variable number of hours worked
Casual worker	<ul style="list-style-type: none">• Employed on an 'as needed' basis• No permanent weekly roster• Hours vary from week to week — for example, 10 hours one week and 3 hours the next• May work for more than one employer
Self-employed	<ul style="list-style-type: none">• An individual who works for themselves
Contract	<ul style="list-style-type: none">• Employed on an 'as needed' basis but for a set time or project

Some key facts about types of work include the following:

- The proportion of employed people who are classified as full-time workers has fallen over the past 10 years.
- In March 2025, the Australian Bureau of Statistics (ABS) reported that approximately 68 per cent of employed Australians were working full-time. A decade earlier, in January 2011, the proportion was higher at 70 per cent.
- In contrast, part-time employment sits at around 30 per cent, with the figure fluctuating over time.
- In September 2024, 60.6 per cent of women were part of the paid workforce in Australia while 68.4 per cent of males were part of the paid workforce.

The unemployed

The unemployed are people who want to work but do not have a job right now. This includes those who lost jobs, are starting a new job or are between jobs.

Permanent, casual, contract and seasonal workers

Permanent workers get paid holiday leave and sick leave. Casual workers do not get these benefits. Seasonal workers work only during certain times of the year. For example, apple pickers work in the harvest season, and ski instructors work in winter when there is snow. Contract work is when someone is hired for a specific job or project for a certain amount of time. Once the job is done, their work ends.

SkillBuilder discussion

Communicating and reflecting

1. What is a seasonal worker?
2. Why are ski instructors only employed during winter?
3. What skills do ski instructors need for their job?

FIGURE 5 Ski instructors are seasonal workers who are employed only during winter.



Voluntary work and other unpaid work

When we look at Australia's labour force, we tend to focus on who is employed, who is unemployed or who is seeking employment. But not all work is paid. We should also remember the important contributions from people who don't fit into these groups. These groups include:

- volunteers who help community groups, like doctors in Doctors Without Borders and country firefighters
- grandparents caring for grandchildren
- parents caring for a sick or disabled child
- parents who stay at home to raise the family.

According to govolunteer.com.au, each year, over 6 million Australians volunteer. People volunteer for many reasons. Some want to learn new skills or gain experience for their résumés. Others want to make friends, try something new, or help their community.

Volunteers are very important in our society. They help non-profit groups like the Volunteer Fire and Rescue Service, Meals on Wheels and community support groups. These volunteers don't get paid, but they give their time to help others. Reasons why people do this type of unpaid work include:

- to gain experience in a job or industry
- to acquire training, skills and/or work experience by participating in formal programs that assist people to obtain work
- to test their job skills
- to contribute time and effort to a not-for-profit organisation.

FIGURE 6 A surf lifesaver is a trained volunteer who helps keep beaches safe on weekends. Surf lifesaving can be fun and may even lead to a job later.



FIGURE 7 Caring for a family member with a disability is a common type of unpaid work.



A lot of unpaid work happens at home, like cooking, cleaning, washing and caring for others. Experts say if this work was paid, it would be worth over \$605 billion!

A 2021 report showed that women do most of the unpaid work, like household chores and caring for people. Women do 76 per cent of childcare, 67 per cent of cleaning, 69 per cent of caring for adults and 57 per cent of volunteering.

In wealthier areas, some couples hire help for these jobs. Still, if a household has 20 hours of unpaid work each week, a woman usually does about 15 hours, while a man does about 5 hours.

7.2.6 Sources of income

As you get older, you start to see how important money is. You need money to have fun with friends, like going to the movies, ice skating or visiting an art gallery. This money often comes from your parents or caregivers who work.

SkillBuilder discussion

Analysing

1. Why is money needed to go to a concert?
2. What other activities require money?
3. How does spending money on activities like concerts affect a person's budget?

FIGURE 8 Going to a concert is just one of the many activities for which you need money.



Once you leave school, you'll likely join the workforce, if you haven't already started working while studying.

Most people work to earn a **wage**, which helps them obtain a certain **standard of living**.

Entrepreneurs also work to make money, and they usually pay themselves a **salary**.

Some people earn a wage based on how many hours they work, while others get a salary, which is a fixed amount, no matter how many hours they work. But money can come from many places, not just jobs.

Some of these sources are shown in **TABLE 3**.

SkillBuilder discussion

Communicating and reflecting

1. How does having a job help someone earn income?
2. What types of goods and services can be purchased with income from a job?
3. Why is income important for meeting daily needs and wants?

FIGURE 9 Jobs provide income that is used to buy goods and services.



TABLE 3 Alternative sources of income

Alternative source of income	Description
Superannuation	Superannuation is money taken out of your income before it is taxed. A minimum of 12 per cent of your income must be put into superannuation for retirement. People are able to access their superannuation when they retire.
Commission	People such as real estate agents may earn a commission. This means that for every sale they make, they receive a small percentage of the money made. The more they sell, the larger the commission they receive.
Welfare payments	People may receive a welfare payment for a range of different reasons. Some retired people receive a pension to help them with their living expenses. Other people may receive a welfare payment if they are unemployed or if they are not working for some other reason (such as illness).
Rental income	Many people in Australia own an investment property. An investment property is one that the owners do not live in. Instead, they rent it out to tenants. The rent payments received from tenants provide an alternative source of income for the owners of the property.
Dividends	Some people choose to invest in companies. To do this they buy a 'share' in the company. These people will then become part owners of the business. They are known as shareholders. When the company makes a profit, it distributes some of the profit to the shareholders, and this is called a dividend.

7.2.7 Being a shareholder

When you turn 18, you can buy shares in a company, making you a shareholder. This means you own a small or large part of the business. As a shareholder, you can benefit from the company's growth. Some people buy and sell shares to earn money.

If a company grows and makes more profit, its share price may go up. This means if you sell your shares later, you can make a profit. Shareholders may also receive dividends, which are a part of the company's profit, paid to them.

However, dividends aren't guaranteed. If a company loses money, it won't pay dividends. The company's board decides if and how much to pay. A person who invests in stocks or other things to make money is called a **speculator**.

7.2.8 Receiving a social security benefit

Most people in Australia can get help from social security payments at some point in their lives. These payments support people in need by helping them pay for healthcare, housing, food and education. Another payment, Medicare, gives money back for some healthcare expenses.

FIGURE 10 Social security benefits include rebates from Medicare.



7.2 SkillBuilder activity ANALYSING

By this point in your life, you may have considered your future aspirations. This activity will allow you to research this further and think about the different dimensions of a job.

1. **Investigate** different types of jobs available. You can use government websites such as Your Career or Jobs and Skills WA. Choose a job that interests you, like actor, doctor or photographer.
2. Click on your chosen job profile and locate the expected wage/salary that this job pays. Write this down if it is stated. Do you think that this is a fair wage? How does it **compare** with other wages for other jobs?
3. Read the overview of the job. **Explain** how this job would contribute to making you feel part of a community. Would it involve you directly caring for a person or group of people? In what way is your chosen job important for society?
4. **Explain** three other benefits that you imagine this job would bring to you.

FIGURE 11 Enjoying something, such as photography, might be a good place to start when thinking about a career. However, many other aspects need to be considered.



7.2 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 4, 5

■ LEVEL 2

2, 3, 6, 8

■ LEVEL 3

7, 9, 10

REMEMBER AND UNDERSTAND

1. Identify three important reasons people work.
 - A. To earn an income
 - B. To improve their standard of living
 - C. To decrease their standard of living
 - D. To increase their stress levels
 - E. To feel improved self-esteem
2. True or false?
 - a. Work can be defined as something that you have to do to pay your taxes.
 - b. According to a recent survey, employees generally care more about making money than about doing their job well.
 - c. Work can be defined as human labour.
3. **Define** what is meant by 'being employed'.
4. **Identify** three examples of volunteer work.
5. Match each of the following terms to the correct definition.
 1. Part-time **a.** The hours of work change each week.
 2. Full-time **b.** Two hours are worked each day from Monday to Friday.
 3. Casual **c.** At least 35 hours a week are worked.

APPLY AND ANALYSE

6. **Compare** a wage and a salary.
7. The number of people looking for and accepting part-time work has increased recently. **Analyse** why this is.
8. **Explain** how a person might combine different sources of income.

EVALUATE AND COMMUNICATE

9. Work is important for providing people with a sense of purpose. **Explain** what this means and give an example of how someone may gain a sense of purpose from their employment.
10. Voluntary workers play a significant role in society. **Explain** whether you agree or disagree. **Justify** your response.

Answers and sample responses for this topic are available online.

LESSON 7.3 Factors that influence consumer and financial decisions

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the factors that influence consumer and financial decisions.

Tune in

Many different factors affect how we spend money. In pairs, discuss the questions below and try to explain your choices.

FIGURE 1 There are many factors that influence our financial decisions.



1. Would you rather buy the latest iPhone now using Afterpay, or save for six months and pay in full?
2. Would you rather buy a \$20 T-shirt from a popular brand, or a \$10 no-name T-shirt that looks similar?
3. Would you rather have a part-time job for money, or volunteer for work experience?

7.3.1 Factors that influence major consumer and financial decisions

Every day, consumers make choices about how to spend their money. Some of these decisions are small and regular — like what snack to buy or which brand of toothpaste to choose. Others are much bigger and less frequent — like whether to buy a car, take out a loan, or save up for a new phone. These choices are called consumer and financial decisions, and they are influenced by many different factors.

Understanding these influences helps people make smarter, more responsible choices about their money.

Some of the main factors that influence consumer and financial decisions include:

- price
- availability and cost of borrowing money
- age and gender of consumers.

Financial decisions are different from consumer decisions because they usually involve buying things that can make extra money for the consumer or business. For example, a person might buy a second home to rent out for income. A business might buy new machinery to improve productivity and profits. These are major purchases, but businesses can also make smaller financial purchases, like buying a new computer.

SkillBuilder discussion

Questioning and researching

1. Why is price important when buying everyday things like milk?
2. How can people make sure they get the best value for their money when buying groceries?
3. How do pricing tricks, like setting prices just below a whole number, influence what people buy at the supermarket?

FIGURE 2 Consumer decisions can be regular and small or large and infrequent.



7.3.2 Price

One of the biggest things that affects what people buy is price. Price is the amount of money a product or service costs. For most people, the amount of money they have is limited, so they have to think carefully about how they spend it. This means that price becomes a key factor in every purchase decision.

For example, imagine you want to buy a new pair of shoes. You find one pair for \$120 and another similar pair for \$80. If the cheaper pair is good quality, you might choose that one to save money. However, if the more expensive pair is from a brand you trust or is made from better materials, you might be willing to pay more.

SkillBuilder discussion

Communicating and reflecting

1. Why is price an important factor when choosing which sneakers to buy?
2. How do discounts influence your decision to buy sneakers?
3. What are some other factors that influence the type of sneakers you purchase?

FIGURE 3 Price can affect what we choose to buy.



In another example, consider a person wanting to invest in the stock market. If the price of stocks is low, they might buy shares hoping their value will increase over time. Conversely, if stocks are expensive, they might wait for a better opportunity or choose alternative investments.

Businesses know that price is important, so they use pricing strategies to encourage people to buy their products. These strategies include:

- discounts and sales — lowering the price for a limited time to attract buyers
- buy one, get one free — offering extra value to make the product more appealing
- psychological pricing — setting prices just below a whole number, like \$19.99 instead of \$20, to make it seem cheaper.

When you're aware of these tactics, you can make better choices and avoid spending more than necessary. Always ask yourself: *Is this good value for the price?*

7.3.3 Availability and cost of borrowing money

Sometimes, people don't have enough money to buy something right away, so they choose to borrow. This means they agree to pay the money back later, usually with some extra cost added on. This is called interest.

Common ways to borrow money include:

- credit cards
- buy now, pay later services like Afterpay or Zip Pay
- personal loans from banks
- car or home loans.

Borrowing can be helpful if used wisely. For example, a person may take out a loan to buy a car so they can get to work. Most lenders charge interest, which is an extra cost added to the amount borrowed. The **interest rate** is the cost of borrowing money — that is, the percentage of the loan you have to pay back on top of what you borrowed. The longer it takes to repay the money, the more interest is paid.

For example, borrowing \$1000 at a five per cent annual interest rate means paying back \$1050 in a year. The extra \$50 is the interest.

Low interest rates make borrowing cheaper, encouraging large purchases. High interest rates make borrowing more expensive, leading people to consider cheaper alternatives or to delay purchases.

Someone wanting to start a business might take out a loan and consider the interest rates and their ability to repay. Lower interest rates make it easier to borrow, while higher rates might lead them to seek different financing options or delay their plans.

It's also important to know that borrowing affects future spending. If you use a credit card to buy something now, you might have less money later because you need to make repayments. This can be a problem if your income changes or unexpected costs come up.

Smart consumers ask themselves questions like:

- Do I really need to borrow for this?
- Can I afford to pay it back in full and on time?
- Is there a cheaper way to get what I need?

SkillBuilder discussion

Analysing

1. Why do some people choose to borrow money to buy things?
2. What are some of the extra costs involved when borrowing money? How do interest rates affect these costs?
3. What factors should you consider before using a credit card to buy something?

FIGURE 4 Using a credit card is one way to borrow money.



7.3.4 Age and gender

Another influence on consumer and financial decisions is who you are — your age, gender, interests and lifestyle. Businesses spend a lot of time and money researching different groups of people so they can design products and advertising that appeal to them.

Age plays a big role in how people spend their money. Teenagers often spend money on fashion, video games, food or music. Adults might spend more on bills, rent, transport or family needs. Older people may focus on health services, insurance or travel. As people grow older, their spending habits change with their needs and responsibilities. The price you pay can also change based on your age. For example, cheaper student prices at the movies, or discounted entry or travel for seniors.

Age also affects financial decisions. For example, young adults may be more likely to invest in cryptocurrencies due to their tech-savvy nature, while older adults might prefer traditional investments like bonds or savings accounts, influenced by their experiences and financial knowledge.

Gender can also influence how people make consumer decisions, although this is becoming less powerful as society becomes more equal and inclusive. For a long time, certain products were marketed more to one gender — like beauty products for women or sports gear for men. Today, many businesses are working to make marketing more diverse and fair, but gender can still play a role in how people choose to spend money.

Sometimes these influences are based on social pressure or expectations.

For example, some people might feel the need to buy certain clothes or gadgets to ‘fit in’ with friends. Others may choose products because of what social media influencers recommend. Being aware of these pressures can help you think more independently and make choices that are right for you.

FIGURE 5 Influencers can impact what we choose to purchase.



7.3.5 Why these factors matter

Understanding the factors that influence consumer and financial decisions is important because it helps people:

- make informed choices instead of just following trends or advertising
- avoid debt by thinking carefully before borrowing
- stick to a budget and plan for the future
- recognise marketing tricks and think critically about purchases.

7.3 SkillBuilder activity ANALYSING

1. Work in small groups.
2. For each scenario below, discuss what has influenced the decision. Identify which influence was greatest: price, borrowing, age/gender/social pressure.

Scenarios:

- Alex uses a credit card to buy concert tickets.
 - Taylah chooses a cheaper phone model to stay within budget.
 - Ahmed buys sports gear because all his friends have it.
 - Ruby takes a small loan to buy a secondhand car for work.
3. **Justify** your decision and explain your thinking to the class.

7.3 Exercise

learn **on**

Learning pathways

■ LEVEL 1

1, 2, 5

■ LEVEL 2

3, 6, 7, 9

■ LEVEL 3

4, 8, 10

REMEMBER AND UNDERSTAND

1. True or false? People's spending habits are influenced by their age and gender.
2. Borrowing money is always cheaper when interest rates are high. True or false?
3. What is most likely to happen when interest rates are very low?
 - A. People save more and spend less.
 - B. Borrowing money becomes more expensive.
 - C. More people take out loans to buy expensive items.
 - D. It becomes harder to get a loan.
4. Identify which of the following is an example of a personal factor that can influence financial decisions.
 - A. Changes in interest rates
 - B. Government tax policy
 - C. Age and gender of the consumer
 - D. The global economy
5. **State** one factor that can influence a person's decision when buying something expensive.

ANALYSE AND APPLY

6. **Explain** what is meant by the 'cost of borrowing money'.
7. **Explain** how a teenager's age might influence their consumer decisions.
8. **Identify** why people may choose not to borrow money during times of high interest rates.

EVALUATE AND COMMUNICATE

9. **Explain** whether it is better to borrow money to buy something now, or save up and pay for it later. **Justify** your answer.
10. Imagine you want to buy a secondhand laptop. **Identify** the three factors you would consider before deciding, and **explain** why.

Answers and sample responses for this topic are available online.

LESSON 7.4 Budgeting for financial goals

LEARNING INTENTION

By the end of this lesson you should be able to **identify** and explain how individuals can plan and budget for long-term and short-term financial goals.

Tune in

All people require money to purchase the things they want (non-essentials) and the things they need (essentials). How could young people make and manage this money?

1. **Make a list of the types of things that you would expect a secondary school student of your age to purchase each week.**
2. **Decide whether these things are *needs* or *wants*.**
3. **Where could a teenager's money come from to buy the items? Regular pocket money, allowance, or other cash income? If so, what methods could they use to make it last until the next payment?**

FIGURE 1 Where does your money come from and where does it go?



7.4.1 The importance of money management

We all enjoy having money to spend, and many aspire to be wealthy. However, few achieve this luxury. It is essential to consider how to earn and manage money effectively.

Starting a business is one way to earn money, showcasing entrepreneurship by creating something unique. If you have skills or a business idea, this path can be rewarding. Whether you run your own business, work for someone else, or have a part-time job, careful planning and money management are crucial.

7.4.2 Setting short-term goals

It is easier to buy what you want if you have clear financial goals in mind. When we think about **short-term goals**, we think about things that we want to do within the next couple of months or even within the year. You probably already have some ideas about the types of things you want to buy now or soon into the future. The good thing about setting goals is that they can give you an immediate and achievable purpose and this may include you saving money to get what you want.

Tips for setting goals:

- Goals should be realistic, or you will become discouraged.
- Goals should be specific. For example, 'My goal is to save \$200 in six months for new sneakers.'
- Avoid vague goals (such as 'My goal is to get rich') because their exact meaning is unclear.

7.4.3 Budgeting

A common short-term financial goal is to save money so that you can buy something expensive in the near future. Having a regular source of money is ideal but won't last long unless you make wise choices about what you do with it. This is why it is important to keep track of your money — how much you receive and how much you spend, so you can make your money work for you.

You may not realise it, but saving money is quite easy. By putting aside even a small amount on a regular basis, you will be amazed at how soon you can build up your savings. Then you will have more cash available to buy those things you really want.

To save the money you need to buy a new gaming console, for example, you will need a **budget**. A budget is a plan that considers the amount of money that you have coming in compared to the money that you have going out. Preparing a budget means that you can plan your finances to ensure that you have enough money to meet your future needs. Most people prepare a budget to manage their personal finances. Families, businesses and governments also use budgets. The aim is always the same: planning to ensure that expected income (estimated cash in) will match or hopefully exceed expected expenses (estimated cash out).

Assessing your current financial position

With a bit of planning, you can start to budget. However, the first stage is to realistically examine your **current financial position**. Here are three questions that you can ask yourself:

- What **income** do you have (money coming in)?
- What are your regular **expenses** (money going out)?
- Do you have any money left over after covering your expenses?

You can start your planning by following the steps illustrated in **FIGURE 3**.

SkillBuilder discussion

Evaluating

1. Based on what you know already, what are the major sources of income for young people?
2. What are the major expenses for young people? How does this differ from adults?
3. Do you think that the above method of saving is realistic? Give reasons for your response.

FIGURE 2 Working out your current financial position is important.



FIGURE 3 If you extend these steps to cover several months of income and expenses, you will gain a more complete picture of your spending and saving habits.

STEP 1 Calculate your monthly income. This includes income you receive from all sources such as pocket money, odd jobs or a part-time job.

INCOME

STEP 2 Calculate your total monthly expenses. Expenses include all the money you spend on items such as entertainment and food.

EXPENSES

STEP 3 Subtract your monthly expenses from your monthly income.

**INCOME MINUS
EXPENSES**

STEP 4 Assess your cash position by comparing your total income with your total expenses.

CASH REMAINING

TABLE 1 shows the current income and expenses of Minh, a 14-year-old Year 8 student.

	January	February	March
Income	\$	\$	\$
Pocket money	45.00	45.00	45.00
Odd jobs	20.00	15.00	5.00
Allowance from grandparents	15.00	15.00	15.00
Total income	80.00	75.00	65.00
Expenses			
Magazine	5.00	5.00	-
Fast food	30.00	25.00	20.00
Games	10.00	10.00	10.00
Clothes	30.00	25.00	25.00
Total expenses	75.00	65.00	55.00
Cash remaining (income – expenses)	5.00	10.00	10.00

SkillBuilder discussion

Analysing

1. Study **TABLE 1**. Can you see some possible savings?
2. Can you see the possibility of extra income?
3. How much is Minh able to save each month given his current income and expenses?

Minh has decided he wants to buy a new PlayStation controller in 3 months' time, at a cost of \$90. This is a short-term goal. He has offered to do some odd jobs around the house for his parents to maintain his income of \$20 per month from this source. He has also decided he can cut back on some spending by reducing his fast-food purchases, limiting his game purchases to \$5 per month and cancelling a magazine subscription.

TABLE 2 shows what Minh's *planned* budget for three months might look like.

	April	May	June
Income	\$	\$	\$
Pocket money	45.00	45.00	45.00
Odd jobs	20.00	20.00	20.00
Allowance from grandparents	15.00	15.00	15.00
Total income	80.00	80.00	80.00
Expenses			
Fast food	15.00	15.00	15.00
Games	5.00	5.00	5.00
Clothes	20.00	20.00	20.00
Total expenses	40.00	40.00	40.00
Cash remaining (income – expenses)	40.00	40.00	40.00

SkillBuilder discussion

Analysing

1. Look at **TABLE 2**. How much is Minh able to save each month given his planned changes to his income and expenses?
2. In total how much has Minh saved?
3. How much will he have left once he has bought his PlayStation controller?

7.4.4 Benefits of saving

Basic budgeting for short-term goals, as shown in the example above, is beneficial as it allows you to develop a savings plan. Saving comes with many benefits for an individual, such as:

- more independence and security
- a sense of satisfaction
- ability to pay for unexpected expenses
- avoiding the need to borrow money and the worry about repaying the debt
- ability to plan for buying big items, such as a bike or a car.

FIGURE 4 What short-term goals do you have? You might wish to try a new sport or hobby, which may mean that you must save money to pay for it.



7.4.5 Setting long-term goals

Long-term personal financial goals are something that you will want to accomplish in the future. **Long-term goals** require time and planning. They are not something you can do this week or even this year. Long-term goals are usually at least five years away. Sometimes it takes many steps to complete a long-term goal.

For example, your long-term goal might be to graduate high school with a senior secondary certificate. This will take several years of going to school and studying. Going to class next month might be one step in achieving your goal. Passing an important test can be another step. Achieving these steps helps you reach your long-term goal.

As a young person, you may not think too far into the future, but once you start to earn money and have a regular income, your short-term financial goals will turn into bigger long-term financial goals. These include putting down a deposit on a house, paying off a mortgage, starting a business, saving for a child's higher education fees, and planning for your retirement fund.

7.4.6 Common long-term personal financial goals

Buying a house

For many, buying a house is a significant financial goal and likely the biggest purchase of their lives. It's also a long-term investment, as property values generally rise over time.

In Australia's major cities, houses bought for under \$100 000 twenty-five years ago can now exceed a million dollars in value. Owning a home offers security, vital for families and those nearing retirement.

Housing is expensive in Australia. The Australian house price to income ratio, which compares the median dwelling price to the median household income, is currently around 8.0, according to ANZ research. This means that, on average, it takes eight years of median household income to purchase a median-priced dwelling.

Buying a home typically requires a mortgage loan, with the house as collateral. This means that if payments are missed, the lender can seize the property. Loans usually span over 20 years or more with monthly repayments. Given the interest, the total repayment can be three to four times the borrowed amount.

Over time, rising wages often make these repayments easier. Many choose to pay more than the minimum to reduce interest and repay the loan faster. Effective financial planning should account for these loan commitments.

FIGURE 5 The purchase of a house can be a great investment for the future.



SkillBuilder discussion

Communicating and reflecting

1. Look at **FIGURE 5**. What event is shown in this image and how does it relate to long-term financial goals?
2. Why is the concept of property investment as a long-term financial goal seen as a good idea?
3. What are the challenges associated with buying a house or managing a mortgage?

Buying a car

Another common long-term financial goal is buying a car. While not as big as buying a house, it still needs careful financial planning. You can choose to save up the total amount needed to purchase a car or get a car loan.

Cars lose value as soon as they are purchased and driven out of the car yard, so it's important to think about this when getting a loan to buy a car. Most car loans last five to seven years, and monthly payments need to fit within your budget. There are also other regular costs such as insurance, maintenance and petrol to think about. It is often smart to save for a big down payment to reduce the loan amount and interest paid over time. Choosing a reliable and fuel-efficient car can also help reduce long-term costs.

7.4 SkillBuilder activity ANALYSING

1. **Identify** two short-term achievable personal financial goals that you or another student in a secondary school might have. It may help to think about things that a student may wish to save for and buy. Examples might be a new phone, gaming console or some new clothes.
 - a. **Determine** how long it might take you to achieve each goal.
 - b. **Compare** your goals with those of others in your class. **Determine** whether they are similar or different.
 - c. **Determine** what you can learn about financial goals by comparing them with the goals of others.
2. **Prepare** a cash budget for the next three months which will allow for the financial goal to be met. Copy the format used for Minh's budget in **TABLE 2**, but with the typical income and expenses of a secondary school student. (You may wish to refer back to the Tune in activity for a list of expenses that a student may have.)
3. **Compare** your budget with that of the person next to you. Explain what similarities and differences you have.
 - a. **Determine** whether your budget allows for any savings.
 - b. If you wanted to save more to meet one of the short-term goals in Question 1, **determine** how you could adjust the budget. **Identify** any extra sources of income you could access, or any possible savings within your expenses.
 - c. **Create** an amended budget to show the changes.

Learning pathways

■ LEVEL 1

1, 3, 4

■ LEVEL 2

2, 5, 6, 7

■ LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

- Which of the following best **describes** the term *budget*?
 - Anything to do with money — particularly income, expenses and savings
 - A compulsory savings scheme
 - A person's wage or salary before it is taxed by the government
 - An estimate of future income and expenses used to assist financial planning
- Define** what is meant by *long-term financial goal*.
- Complete the following sentences.
 - Income is otherwise known as money **coming in / going out**.
 - Expenses are otherwise known as money **coming in / going out**.
- 'My goal is to be a millionaire by the time I'm 30.' Identify the problems with this statement as a short-term financial goal. Select all possible answers.
 - It is not specific.
 - It is unrealistic.
 - It is too realistic.
 - It is a longer-term goal.
 - It is impossible.
- State** the steps involved in preparing a budget.

ANALYSE AND APPLY

- Describe** the benefits of preparing a cash budget.
- Explain** what is meant by the term *budget* and **outline** why a budget might be a useful tool for an individual to use.
- Distinguish** between short-term and long-term personal financial goals, providing an example.

EVALUATE AND COMMUNICATE

- Provide two examples of short-term personal financial goals. **Evaluate** the costs and benefits of setting short-term personal financial goals.
- Determine** the difference between wants and needs in relation to budgeting and financial planning.

Answers and sample responses for this topic are available online.

LESSON 7.5 Rights and responsibilities of consumers and businesses

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the rights and responsibilities of consumers and businesses in Australia.

Tune in

We all buy things and sometimes want to return them for a refund or exchange. **As a class, talk about whether signs like the one in FIGURE 1 should be allowed and, if so, in what circumstances.**

FIGURE 1 Should signs like this one be allowed?



7.5.1 Australian Consumer Law

Australian Consumer Law protects people from dishonest businesses. Other laws ensure that buyers and sellers can enforce their rights in court. Criminal laws protect people from threats in business. Our court system allows everyone to take legal action to protect their rights.



FIGURE 2 Australian Consumer Law protects consumers from unscrupulous businesses that could try to cheat them.



7.5.2 Fair transactions

As a consumer, you might feel unsure when buying goods and services. You often depend on salespeople for help. You want to be sure they respect your needs and don't try to take advantage of you. Australian Consumer Law aims to keep buying and selling fair for everyone.

7.5.3 Honesty is the best policy

The Australian Consumer Law says sellers must be honest in advertising their products. It is illegal to mislead or trick customers into buying something. Here are some examples of illegal behaviour under this law.

- *Misleading or deceptive conduct:* Advertisements can't make false claims about products, like saying prices are low or items are 'on special'.
- *Unconscionable conduct:* This is any business conduct that is unfair or unreasonable.
- *Offering gifts and prizes in connection with the supply of goods and services and then not providing them.*
- *Conduct that may mislead the public:* An example is using a name like a famous brand or showing an Australian-made logo when the product is made overseas.
- *Bait advertising:* This is when a store shows low prices to attract customers but has very few of those items. When they run out, customers are pushed to buy more expensive products.
- *Referral selling:* This is when a business gives a special deal to a customer for bringing in new buyers who make a purchase.

SkillBuilder discussion

Analysing

1. Look at **FIGURE 3**. What is the special offer in the image? How would this affect your purchasing decisions?
2. What are some common types of special offers used by sellers in Australia?
3. How do Australians typically respond to seasonal promotions and discounts offered by retailers?

FIGURE 3 Any discounts, special offers or specials offered by sellers must be genuine.



7.5.4 Treating consumers fairly

Consumers want to buy goods and services to meet their needs. This eagerness can be taken advantage of by dishonest sellers. Consumer law requires sellers to share all important information and ensures fair rights for both buyers and sellers. Here are some of these rights:

- Any contract a consumer signs must be fair and easy to understand. It can't let the seller change the rules without telling the buyer. For example, a mobile phone contract can't let the company change prices without warning. Consumers should read contracts carefully to make sure they understand them.

- A consumer has the right to ask for a receipt for any transaction, no matter how small the amount involved. For all transactions over \$75, a receipt is compulsory.
- Salespeople can only sell door-to-door or over the phone from 9 am to 6 pm on weekdays, and 9 am to 5 pm on Saturdays. They can't sell on Sundays or public holidays unless you set an appointment. If you ask a salesperson to leave, they must go right away and not contact you for 30 days about that product. If you buy something from them, you have a 10-day 'cooling-off period' to cancel the deal without paying.
- Lay-by agreements must be written in simple, clear language and include all terms and conditions.
- Businesses with 'no refunds' signs are breaking the law. If a product is faulty or doesn't work as it should, a refund must be given. But if you change your mind and the product is fine, they don't have to refund you.

7.5.5 Warranties for consumers

Manufacturers or sellers often give guarantees or warranties. These are promises to fix or replace a product for free if it breaks. Even without a written warranty, the Australian Consumer Law requires that all products have basic guarantees. Businesses can't take away these rights but can add more if they want. Here are some guaranteed rights under the law:

- The buyer gets legal ownership of goods, meaning the seller owns the goods and can transfer them to the buyer.
- Goods must match any sample, demonstration model or description provided to the buyer.
- Goods must be of acceptable quality. This means they should be safe, last a long time and look good. For example, if jeans fall apart after a week, they are not of acceptable quality.
- Products must do what they are meant to do. For example, shampoo should wash hair well.
- Repairs and spare parts must be available for a reasonable time after manufacture and sale.
- Any needed servicing must be done carefully and finished in a reasonable time.

FIGURE 4 Goods must be of good quality. For example, if a phone stops working after a few weeks, it's not of good quality.



7.5.6 When the law is broken

The Australian Consumer Law is enforced by state and territory offices, like Fair Trading or Consumer Protection WA. If a consumer has a problem with a seller, these offices usually suggest contacting the seller first. If that doesn't work, they can help talk to the business. If the issue isn't resolved, they can take legal action for the consumer. This may lead to the seller having to pay money or fix the faulty products. The business might also be fined for breaking the law.

FIGURE 5 Fair Trading advises you try to solve the problem with the seller first.

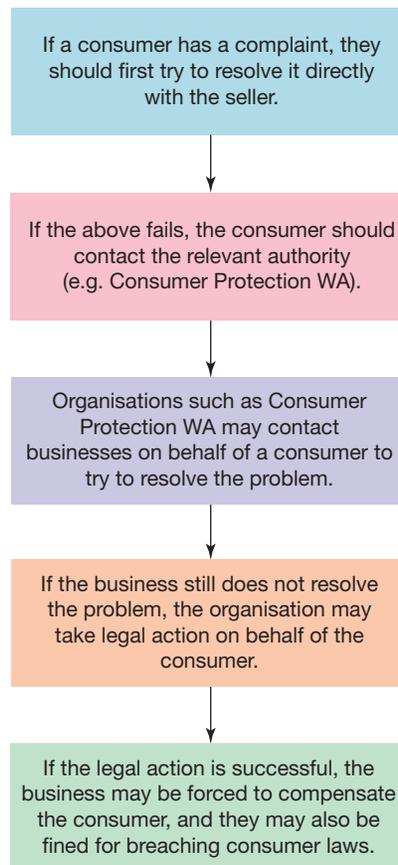


SkillBuilder discussion

Communicating and reflecting

1. According to the information in **FIGURE 6**, what should a consumer do first if they believe a business has violated consumer laws in Australia?
2. How can consumers formally lodge a complaint against a business suspected of breaching consumer rights?
3. What resources help consumers resolve disputes over breaches of consumer laws in Australia?

FIGURE 6 These steps may help a consumer resolve an issue when they feel a business has breached consumer laws.



7.5.7 Responsibilities as well as rights

The Australian Consumer Law protects buyers, but consumers also have responsibilities. Here are some of them.

- When you buy goods or services, you make a legal contract. This doesn't always mean signing a paper. Any agreement between a buyer and seller is a contract, even without a signature. As a buyer, you must pay the right amount for what you buy. This is important if you buy on credit, like a phone with a payment plan.
- If you borrow money or use a credit card, you must pay it back. If you don't, your **credit rating** can be lowered. This can last for five years and might stop you from getting loans during that time. For example, Mia is 19 and gets her first credit card. She uses it to buy a new laptop for \$1200 but doesn't pay it back. After a few months, the bank reports that Mia hasn't made her repayments. This goes on her credit report as a default. Her credit rating drops, and this stays on her record for five years. Later, when Mia tries to get a loan to buy a car, the bank checks her credit history and rejects her application because of the unpaid debt.
- You can't return items for a refund if you use them incorrectly. If you break something by using it the wrong way, you usually can't get money back. It's important to use things as the maker intended.

7.5.8 When purchases go wrong

You may occasionally hear about a car model being recalled to fix a problem. You might also hear about people getting sick from food at a restaurant. We want every purchase to be safe, but that doesn't always happen. It's important to protect consumers and make sure the products we buy are safe.

7.5.9 Who keeps us safe?

Many groups help make sure the goods and services we buy are safe. These include government regulators and organisations like Choice. Their roles are explained in the next sections.

Government regulators

Governments at federal, state, territory and local level have established a number of bodies to ensure product safety.

- The ACCC includes ensuring product safety among its various roles.
- State and territory consumer protection and fair trading authorities have a major role within their respective states.
- Customs and quarantine checks watch goods from overseas to find any dangerous products.
- Some organisations focus on specific products. For example, the Therapeutic Goods Administration makes sure medicines and devices, like wheelchairs, are safe.
- Local health authorities check restaurants, cafes and school canteens to ensure they are clean and safe.

FIGURE 7 Customs officers check containers of goods from overseas to prevent dangerous goods from entering the Australian market.



Other groups

Many organisations in the community share the responsibility for keeping products safe.

- *Businesses:* Manufacturers and sellers must make sure their products are safe. If a product harms someone, they can be sued. To avoid this, businesses should carefully control how they make their products.
- *Technical bodies:* Worldwide groups like the International Organization for Standardization (ISO) create quality standards for products. If a product meets these standards, it can show an ISO number. This helps consumers know it is safe and of high quality.
- *Consumers:* Buyers also have a responsibility for safety. Choice, which used to be called the Australian Consumers' Association, has a magazine and a website. The organisation tests products and shares its findings. Consumers should also check the safety of items like electrical cords and use safety features in cars to keep them safe.

FIGURE 8 If a product has ISO certification, it means it is safe and of high quality.



7.5.10 Product recalls

Government bodies check all markets for unsafe products. They look for news about injuries or deaths linked to products. They test new products and respond to consumer complaints. They also keep an eye on new products from other countries. This can result in removing unsafe goods in a recall.

Products need to be recalled if they are found to be dangerous. People who bought the product should return it to the store. If it can be fixed, it will go back to the manufacturer. If it can't be made safe, buyers get a refund. Recalls are announced in the media, often with special notices in newspapers. If companies know who bought the product, they contact those people directly.

Sometimes governments will negotiate the product removal from sale entirely. This involves gaining agreement from suppliers to remove dangerous goods from sale in their stores or outlets, including online outlets.

SkillBuilder discussion

Analysing

1. Look at the image shown. Discuss where and when you have seen a recall notice like the one above.
2. Discuss the advantages and disadvantages of issuing these notices.

FIGURE 9 Manufacturers that discover a fault in any of their products are expected to recall these products for repair, replacement or refund.



7.5 SkillBuilder activity

COMMUNICATING AND REFLECTING

Complete your own research using the websites of Consumer Protection WA and the Australian Competition and Consumer Commission (ACCC). Locate the product recall pages and select three recalled products.

1. **State** the name of the product.
2. **Identify** the defect in the product.
3. **Explain** why that defect was dangerous.
4. What advice was given to consumers?
5. What did the ACCC recommend?

Learning pathways

■ LEVEL 1

1, 2, 3, 8

■ LEVEL 2

4, 5, 7, 9

■ LEVEL 3

6, 10

REMEMBER AND UNDERSTAND

- One responsibility that _____ have is to use the goods as manufacturers intended.
- True or false? Australian Consumer Law aims to ensure all interactions between buyers and sellers are fair.
- Identify** two guaranteed rights that consumers have in relation to goods they purchase.
- Select the correct option to complete the sentence. Consumers are entitled to a refund **if they change their mind / if the item is faulty / for any reason at all.**
- Identify how consumers can play a role in product safety.
 - By buying fewer products
 - By only buying products from expensive stores
 - By reporting faulty products to the business or a government body
 - By complaining about the product on social media

ANALYSE AND APPLY

- In each of the following examples, **explain** why a breach of Australian Consumer Law has occurred.
 - An electrical goods business advertises a particular brand of television and falsely states that it is at a cheaper price than that offered by a competitor.
 - A clothing store advertises T-shirts, claiming that they are made in Australia when they are made in Hong Kong.
 - A take-away food outlet advertises that a special deal is only for one week when it plans to extend it for two months.
 - A garden business gives a ten per cent discount if you share names and addresses of five potential customers.
- Explain** the rules that apply to phone sales and door-to-door selling.
- Explain** what powers a consumer protection or fair trading authority has to enforce Australian Consumer Law.
- Identify** two bodies established to maintain product safety.

EVALUATE AND COMMUNICATE

- 'Most businesses are concerned about maximising their profits, so we need consumer protection laws to regulate their behaviour.' **Discuss** this statement.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to **identify** processes that individuals and/or businesses use to plan and budget to achieve short-term and long-term financial objectives.

Background

Why is personal, organisational and financial planning for the future important for consumers and businesses?

Omari is an electrician. He works full-time and has been in his current occupation for five years. Omari earns a fair wage, and he is saving for a deposit on a house. Omari enjoys his job, and his employer is thinking about moving into a new market to repair faulty electrics on solar panels. This is a growing need for homes that have solar panels installed.

FIGURE 1 What kind of financial decisions does a full-time electrician need to make?



Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

You will use two online sources of reference for this inquiry, the Australian Bureau of Statistics and Labour market insights.

Step 1: Questioning and researching

- 🔗 Omari works full-time. Use the **Australian Bureau of Statistics** weblink to help you answer the following questions:
 - a. **Define** what is meant by full-time employment.
 - b. What is the current rate of unemployment in Australia?
 - c. What are the average weekly earnings in Australia?
- 🔗 Omari is an electrician. Use the **Labour market insights** weblink to locate the job profile for an electrician.
 - a. What would Omari's weekly earnings be?
 - b. What is the average age of an electrician?
 - c. What percentage of electricians are male?

Step 2: Analysing

Omari is saving for a deposit on a house.

- a. **Explain** what kind of financial goal this is. Do you think that this is a sensible goal? Explain and justify your answer.
- b. Omari's employer wants to enter a new market, repairing solar panels. Why might the business have decided to do this? What influences will the business need to consider before taking the opportunity to enter the new market?

Step 3: Evaluating

Omari's employer would like him to be a partner in the business.

- a. What are the potential benefits and risks for Omari if he enters the new market for repairing solar panels?
- b. Assess the impact of this new market on Omari's financial goal of saving for a house deposit.
- c. **Outline** the advantages and disadvantages to Omari going into partnership with his employer.

Step 4: Communicating and reflecting

Present your findings to your class. Advise Omari on what he should do: should he enter the partnership with his employer? Will he still be able to save for a deposit on his house? Is being an electrician a stable profession?

LESSON 7.7 Review

7.7.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

7.2 Why people work and how they earn money

- Work is important for everyone. It helps us buy what we need and want. Work also has benefits that don't involve money.
- People work for different reasons: to earn money, to improve living standards, to have a sense of purpose and enjoyment and to help others.
- Work can be paid or unpaid, full-time, part-time, casual and contract.
- Work can be voluntary, and volunteers make an important contribution to the community.
- Sources of income include salary and wage-based work, commissions and return on investments.

7.3 Factors that influence consumer and financial decisions

- Factors influencing consumer and financial decisions include price, borrowing, age, gender, interests and lifestyle.
- Price is a key factor in purchasing decisions, influencing choices between different products.
- Borrowing money can help make large purchases, but it comes with extra costs like interest.
- Interest rates impact borrowing costs, with low rates making borrowing cheaper.
- Age and gender play roles in spending habits, with different groups prioritising different types of purchases.

7.4 Budgeting for financial goals

- Individuals can improve their financial flexibility by saving money, allowing them to avoid debt and be prepared for unexpected expenses.
- Preparing a personal budget can assist us to achieve our financial goals.
- Longer-term financial goals include home ownership or buying a car and often involve taking a loan.

7.5 Rights and responsibilities of consumers and businesses

- Australian Consumer Law prohibits a range of practices that could mislead consumers.
- It is compulsory for sellers to provide all available information to consumers, and to ensure that buyers and sellers have equal rights in any purchase.
- Australian Consumer Law also provides a number of basic warranties or guarantees in relation to the quality of goods purchased.
- A number of different government regulators monitor product safety throughout Australia.
- These regulators encourage the development of safety standards, and seek to educate suppliers and the public on product safety.
- The regulators can ban dangerous products, or order the recall of products to ensure they are made safe.

7.6 Inquiry: Consumer and financial decision-making

- Planning is needed for individuals to achieve short-term and long-term financial goals.
- Individuals respond in different ways to major financial decisions.

7.7.2 Key terms

budget an itemised estimate of income and expenses for a given period

casual an employee who works only when needed

credit rating evaluates how likely a person or entity is to repay borrowed money based on their past borrowing and repayment history. Lower ratings mean higher risks and can result in higher interest rates or difficulty getting loans.

current financial position calculation of what income someone has (money coming in) minus any regular expenses (money out)

expenses the regular outgoings of money (money out) that a person may have. This might include rent or a mortgage, grocery bills, energy bills, a loan repayment for a car, and medical bills.

full-time an employee who works 35 hours or more per week, or who works the minimum number of hours stipulated by the industrial award for that occupation or industry

income the money that a person receives. This can consist of money earned from employment such as a wage, but it also includes income from other sources.

interest rate the cost of borrowing money — the percentage of the loan you have to pay back on top of what you borrowed

long-term goals personal financial goals that you will want to accomplish in the future — e.g. to buy a house

material living standards access to physical goods and services

non-material living standards factors that affect a person's quality of life regardless of income

part-time an employee who works fewer than 35 hours per week

salary fixed or regular payment for work completed or services performed

seasonal an employee who usually works during a season, such as winter or the fruit-picking season

short-term goals goals that we want to achieve within the next couple of months or even within the year; this might include a plan to buy something

speculator a person who invests in stocks, property or other ventures in the hope of achieving a profit and a source of income

standard of living quality of life as measured by the amount of money made by an individual or household (using income per capita or income per household)

wage payment for work completed or services performed, usually dependent on hours worked per week or month

work-life balance the division of one's time and focus between working and family or leisure activities

7.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How do individuals make informed decisions about work, income, spending, saving, and their rights as consumers in the Australian economy?

1. Now that you have completed this topic, what is your view on the questions? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry questions, outlining your views.

learn on

-  **Post-test** Online post-test
-  **eWorkbooks** Customisable worksheets for this topic
Reflection
-  **Digital document** Key terms glossary

7.7 Review exercise

Learning pathways

■ LEVEL 1

1, 3, 6, 7, 8, 11

■ LEVEL 2

2, 4, 5, 9, 12, 14

■ LEVEL 3

10, 13, 15

REMEMBER AND UNDERSTAND

- Sources of income include:
 - casual work and odd jobs.
 - salaries from working full-time or part-time.
 - payments from superannuation.
 - all of the above.
- What must you be to be officially considered employed?
 - Actively contributing to society
 - Working more than one hour in a full-time, part-time or casual position
 - Over the age of 15 and looking for work
 - All of the above
- Which of the following groups is not part of the labour force?
 - People actively looking for work
 - Unemployed people
 - Casual workers
 - Pensioners
- Why do most people work?
 - To get rich and famous
 - To buy a brand-new car and designer clothes
 - To receive an income
 - To fulfil a lifelong dream
- What can material living standards be measured by?
 - The amount of goods and services you can afford
 - The feeling of satisfaction you receive from work
 - How stressed you feel
 - The levels of crime, and the leisure time and facilities you have access to
- What is a financial benefit of participating in the workforce?
 - Developing your skills and talent
 - Being able to be a consumer
 - Increasing your levels of happiness
 - Contributing to the Australian economy
- What can casual work be defined as?
 - Full-time employment
 - Volunteer or community support roles
 - Working a set shift pattern each week
 - Working only when needed
- People work for a sense of purpose. Identify what this means.
 - A person is satisfied with the money they earn.
 - A person feels meaning and fulfillment from their achievements in the workplace.
 - A person is satisfied with their working conditions.
 - A sense of purpose is the feeling of enjoyment we get from friends and family.
- What is 'bait advertising'?
 - When customers are fraudulently enticed into a business by lower prices on a small number of items
 - When a business offers customers a special deal to persuade their friends to deal with the business
 - When a business uses fake samples to entice the customer into the business
 - When a business lowers its prices

10. When does a customer have no automatic right to return goods for replacement or refund?
- A. If the goods are found to be unfit for their usual purpose
 - B. If the customer has lost the receipt issued by the business
 - C. If the business clearly displays a 'no refunds or replacements' sign
 - D. If the customer changes their mind and decides not to keep the goods

ANALYSE AND APPLY

11. **Discuss** the benefits of working as a volunteer.
12. a. **List** three personal financial goals that you may have as a working adult.
b. A common goal is to want to purchase a house. **Discuss** the risk that comes with buying a house.
13. **Analyse** how the factors of price, availability and cost of borrowing money, age, and gender influence consumer and financial decisions. Provide examples for each factor.

EVALUATE AND COMMUNICATE

14. **Discuss** whether we work for a living or live to work. **Explain** your answer.
15. **Explain** the concept of personal budgeting. **Propose** how you might use this type of budgeting when you are working in a full-time job.

Answer and samples responses for this topic are available online.

8 Geographical concepts and skills

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LESSON 8.1 Overview

INQUIRY QUESTION

Why is Geography important to study, and what skills do I need to understand Geography?

Studying Geography helps you and your community by building essential knowledge and skills for the present and future. These concepts will aid not only in Geography but also in everyday tasks like navigation. It might even benefit your future career in Australia or abroad. You will explore topics that enhance your understanding of local and global environments and investigate pressing issues for the future.

learn on

-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital document**
Key terms glossary
-  **Video eLesson**
Geography concepts and skills

An aerial photograph of a geothermal landscape. The foreground and middle ground are dominated by intricate, multi-colored terraces of mineral deposits. The colors range from pale yellow and tan to vibrant turquoise and deep blue-green. The terraces are irregular in shape, with some forming large, interconnected pools. In the background, a steep, rocky mountain slope is partially covered in snow. The sky is overcast with grey clouds. The overall scene is a striking contrast of natural mineral formations and winter weather.

SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

LESSON 8.2 Geographical concepts and skills

LEARNING INTENTION

By the end of this lesson you should be able to:

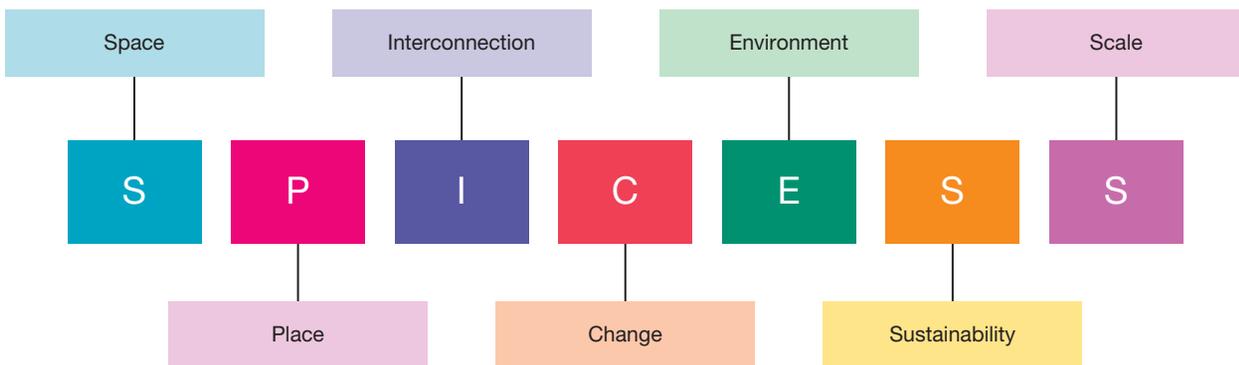
- **identify, explain and apply** the seven Geography concepts using the acronym SPICES
- **apply** the skills that geographers use.

8.2.1 Introduction

Geographical concepts help you to make sense of your world. By using these concepts, you can investigate and understand the world you live in. The concepts help you to think geographically. There are seven major concepts: **space, place, interconnection, change, environment, sustainability** and **scale**.

You will use the seven concepts to investigate two units: *Landscapes and landforms* and *Changing nations*.

FIGURE 1 A way to remember these seven concepts is to think of the acronym SPICES.



8.2.2 What is space?

The concept of space focuses on the location and distribution of things on the surface of the Earth. The space can be organised and managed by people or it can simply be where things are located in the natural environment.

When referring to space in Geography, location can be absolute or relative.

- Absolute location is the unique location of a site or geographical feature. For example, the absolute location of Broome is 122°14' east longitude and 17°57' south latitude.
- Relative location is the location of a place or feature in relation to other places. It can be described by direction and distance from other places and features. For example, Broome is 1681 km N of Perth.

A place can be described by its absolute location (latitude and longitude) or its relative location (in what direction and how far it is from another place).

8.2.3 What is place?

The world is made up of places, so to understand our world we need to understand its places by studying their variety, how they influence our lives and how we create and change them.

Places may be natural (such as an undisturbed wetland) or highly modified (like a large urban conurbation).

Place refers to how people perceive a location. You often have mental images and perceptions of places — your city, suburb, town or neighbourhood — and these may be very different from someone else's perceptions of the same places.

SkillBuilder discussion

Communicating and reflecting

1. Look at **FIGURE 2**. What challenges would you imagine that people living in the Paraisópolis favela face?
2. Would the residents of the favela have a different sense of 'place' to that of the residents of the wealthier areas?

FIGURE 2 The Paraisópolis favela (slum), home to 60 000 people, is situated next to the gated complexes of the wealthy Morumbi district of São Paulo in Brazil.

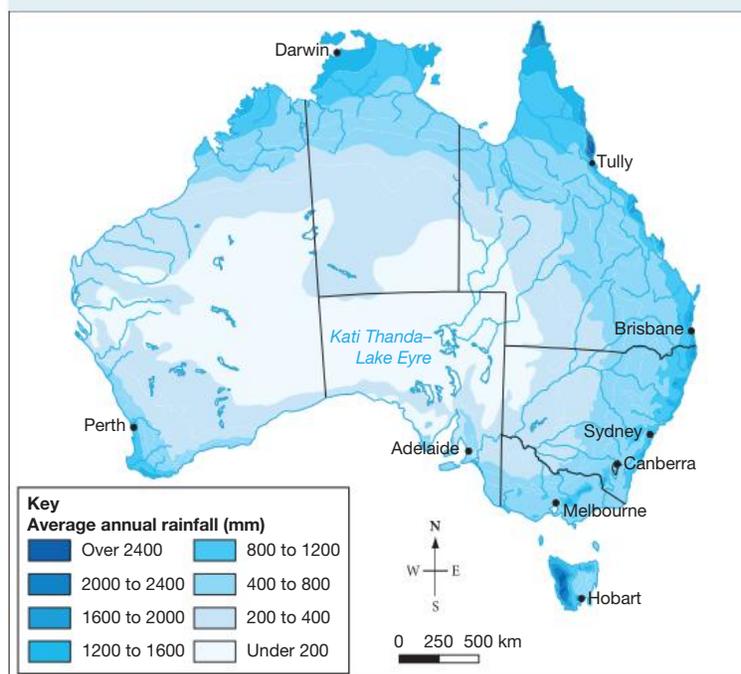


8.2.4 What is interconnection?

People and things are connected to other people and things in their own and other places. Understanding these connections helps us to understand how and why places are changing. The concept of interconnection emphasises that no object of geographical study can be viewed in isolation. It is about the ways that geographical phenomena are connected to each other through environmental processes, the movement of people, flows of trade and investment, the purchase of goods and services, cultural influences and the exchange of ideas and information.

An event in one location can lead to change in a place some distance away.

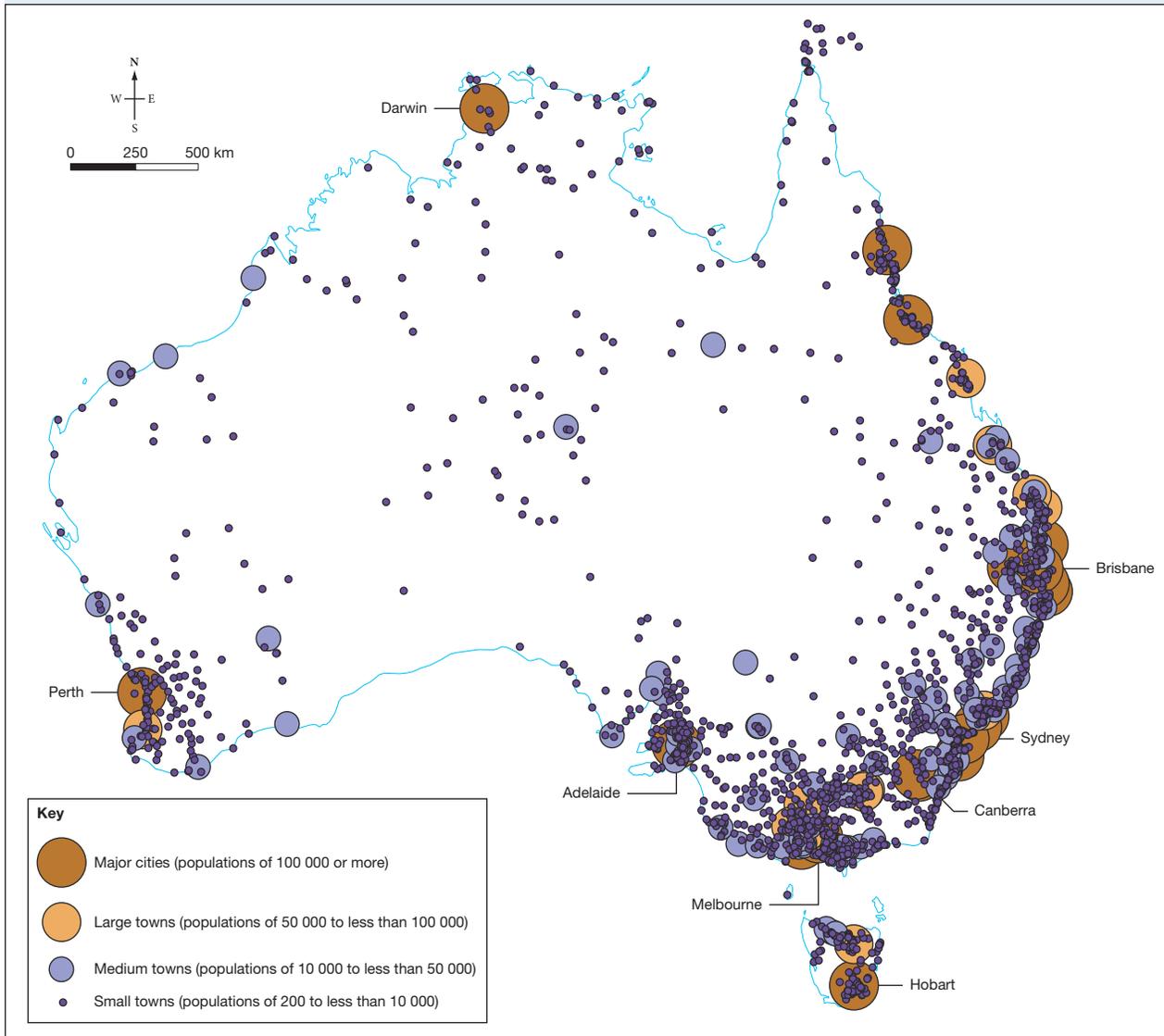
FIGURE 3 Distribution of annual rainfall in Australia



Source: MAPgraphics Pty Ltd, Brisbane



FIGURE 4 Australia's population distribution and density



Source: Australian Bureau of Statistics

SkillBuilder discussion

Analysing

Look at **FIGURES 3** and **4**. Do these factors lead to change elsewhere? Are rainfall and population interconnected?

8.2.5 What is change?

The concept of change refers to using time to better understand a place, an environment, a spatial pattern or a geographical problem.

Some changes can be fast and easily observed; others are very slow. For example, cities can expand outwards over a number of years. Similarly, landforms generally change very slowly, as with the formation of mountains. But some landscape change can be very fast, as is the case with landslides, volcanic eruptions and deforestation.



FIGURE 5(a) Landscape before deforestation

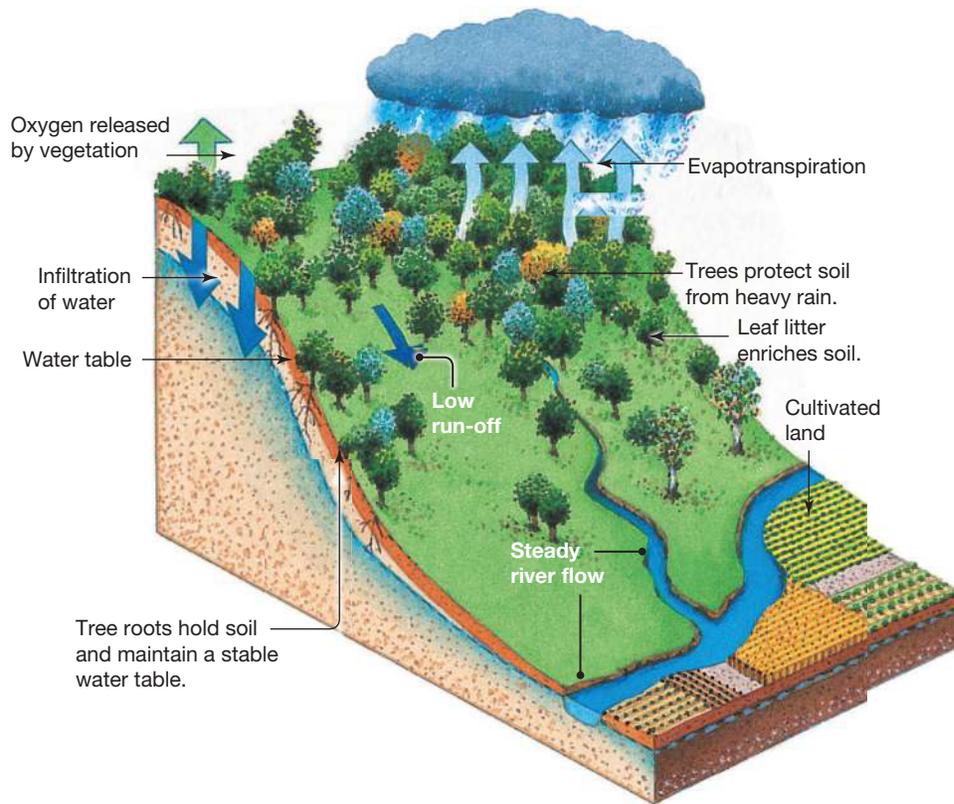
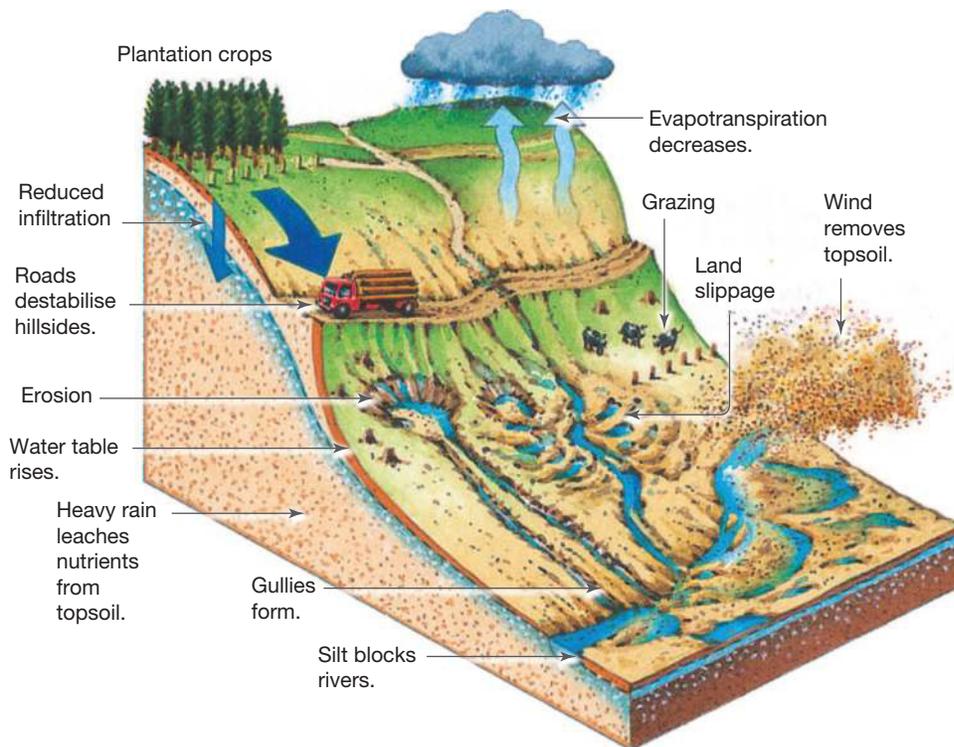


FIGURE 5(b) Landscape after deforestation



SkillBuilder discussion

Analysing

1. Look at **FIGURES 5 a** and **b**. Describe the scenes before deforestation and after deforestation.
2. What are the most significant changes?

8.2.6 What is environment?

People live in and depend on the environment, so it has an important influence on our lives.

The environment is the physical and biological world around us. It supports and enriches human and other life by providing raw materials and food, absorbing and recycling wastes, and being a source of enjoyment and inspiration to people.

8.2.7 What is sustainability?

Sustainability refers to the capacity of the environment to support our lives and those of other living creatures.

Sustainability is about the interconnection between the human and natural world, and who gets which resources and where. It involves the use of resources in a responsible way that doesn't exhaust them for future generations.

FIGURE 6 An image of a 'shelterbelt'. Shelterbelts are a sustainable farming practice, where land is divided by trees and shrubs.



FIGURE 7 Melbourne Airport is developing a solar panel network designed to generate enough energy to power all of its terminals.



SkillBuilder discussion

Questioning and researching

1. Look at **FIGURE 6**. List the ways that shelterbelts are sustainable.
2. Consider **FIGURE 7**. Explain how this is sustainable in a geographical sense.

8.2.8 What is scale?

When we examine geographical questions at different spatial levels, we are using the concept of scale to find more complete answers.

Scale can vary from personal and local to regional, national or global. Looking at things on a range of scales provides a deeper understanding of geographical issues.

FIGURE 8 Perth, Western Australia. Building sustainable communities means we must work at various scales.



Source: © Commonwealth of Australia Geoscience Australia 2006.

Ways to improve sustainability at the local scale include:

- reducing the ecological footprint
- protecting the natural environment
- increasing community wellbeing and pride in the local area
- changing behaviour patterns by providing better local options
- encouraging compact or dense living
- providing easy access to work, play and schools.

Ways to improve sustainability at the city scale include:

- building strong central activity areas (one major hub or a number of activity areas)
- reducing traffic congestion
- protecting natural systems
- avoiding suburban sprawl and reducing inefficient land use
- distributing infrastructure and transport networks equally and efficiently to provide accessible, cheap transportation options
- promoting inclusive planning and design
- providing better access to healthy lifestyles (e.g. cycle and walking paths)
- improving air quality and waste management
- using stormwater more efficiently
- increasing access to parks and green spaces
- reducing car dependency and increasing walkability
- promoting green spaces and recreational areas
- demonstrating a high mix of uses.

FIGURE 9 Activity and green areas in a new suburb



8.2.9 Skills used in studying Geography

As you become more familiar with Geography, there are four essential skills to practise and master. The SkillBuilder lessons in this topic will show you how to apply the HASS skills in Geography and also teach specific Geography skills. You will practise with activities related to the topics covered in this subject.

TABLE 1 The four HASS skills you will develop in Geography in Year 8

Skill	Description
Questioning and researching	You will construct a range of questions related to Geography. You will collect and record information including through fieldwork. You will use a range of formats to identify gaps in current understandings and formulate questions about issues such as urbanisation and migration, or the relationship between migration push and pull factors.
Analysing	You will select and interpret information and perspectives. You will analyse data using the concepts of space, change, interconnection and environment. For example, you could be using an analysis social, cultural and economic factors to understand the impacts of a geomorphic hazard.
Evaluating	Geography is all about making decisions and coming to conclusions in an evidence-based manner. You will evaluate information using the concepts of space, change, interconnection and environment. For example, you might use an analysis of internal migration to interpret change over time.
Communicating and reflecting	Communicating your ideas and reflecting on your conclusions are key skills you will develop in the study of Geography. When communicating in Geography you need to ensure that you consider your audience, acknowledge your sources and choose appropriate methods of communication to ensure your message is clear and well conceived. In Year 8 you will communicate information in different formats and develop new presentation skills.

8.2 SkillBuilder activity

COMMUNICATING AND REFLECTING

1. Think about interconnection.
Begin by considering what interconnection means in Geography. Think about how people and places are linked — for example, how a product you use might come from another country, or how your actions might affect the environment.
2. Create your interconnection map.
On a blank sheet of paper or using a digital tool, draw a map that shows how you are connected to different places. Include:
 - where your food comes from
 - where your clothes are made
 - places you have visited or have family
 - online connections (e.g., games, social media)
 - environmental connections (e.g., where your water or electricity comes from).Use arrows and labels to show how each place is connected to you and what the connection is.
3. Reflect on your map.
Answer the following questions.
 - a. What did you learn from creating your interconnection map?
 - b. Which connection surprised you the most?
 - c. Can you think of a change in one of these places that might affect your life? How?
4. Display your map in the classroom. Walk around and view your classmates' maps. Look for similarities and differences in the types of connections they have identified.
5. Going further: Choose one of your connections and research it in more detail. For example, trace the journey of a piece of fruit from the farm to your home. Present your findings as a short report or digital story.

Learning Pathways

■ LEVEL 1

3, 5, 7

■ LEVEL 2

1, 2, 6

■ LEVEL 3

4, 8

REMEMBER AND UNDERSTAND

1. How does the concept of 'place' influence human activities?
 - A. It is a physical location with a specific address.
 - B. It holds meaning and significance for individuals or groups.
 - C. It is characterised by a particular climate.
 - D. It is a space used for human activities.
2. What role does interconnection play in Geography?
 - A. It separates regions from one another.
 - B. It shows how features and processes are related and affect each other.
 - C. It identifies isolated geographical locations.
 - D. It maps the boundaries of continents.
3. Which of the following best defines the concept of 'space' in Geography?
 - A. The arrangement of objects and people on the Earth's surface
 - B. The physical distance between two locations
 - C. An area with defined boundaries
 - D. The atmosphere surrounding the Earth
4. What does sustainability aim to achieve in geographical terms?
 - A. Unlimited consumption of resources
 - B. Preservation of resources for future generations
 - C. Economic growth without environmental concerns
 - D. Expansion of urban areas
5. Which of the following is an example of a natural environment?
 - A. A city park
 - B. A rainforest
 - C. A shopping mall
 - D. A residential neighbourhood

ANALYSE AND APPLY

6. **Explain** what is meant by the concept of 'space' in Geography. How does the arrangement of different spaces influence human activities?
7. **Discuss** the concept of 'change' in Geography and provide examples of both natural and human-induced changes. Refer to a place that has changed over time.

EVALUATE AND COMMUNICATE

8. **Identify** one advantage and one disadvantage of each method for collecting geographical information: field observations, remote sensing, and GIS.

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **explain** what contour lines are and why they are useful. You should also be able to read contour lines on a topographic map.

8.3.1 Tell me**What are contour lines?**

Contour lines drawn on a map join all places of the same elevation (height). These lines are usually brown and have a number written on them to indicate height above sea level. Contour maps are used to show the relief (shape) of the land and the heights of the landscape. Land heights are identified from aerial photography. Natural features, such as rivers, lakes and beaches, and human features, such as towns, roads and power lines, are added to the map to complete the landscape picture. Symbols provided in a legend (or key) or labels on the map add information to complete the image of the environment.

Why are contour lines useful?

It is not possible to see an entire area when in the environment, so maps with contour lines show the relief of the land and help people to identify features. They are also useful because they tell us the actual height above sea level of particular locations on a map. Contour lines are used by many people, and for various purposes, such as:

- organising a hike
- land-use planning of roads, airports, train lines and power-line routes
- identifying slopes for building sites
- planning decisions
- leisure activities; for example, working out where the best rapids on a river might be or where to launch or land a hang-glider.

Reading contour lines on a map involves:

- identifying a contour line
- finding its number (metres above sea level)
- determining the contour interval
- checking spot heights.

8.3.2 Show me**How to read contour lines**

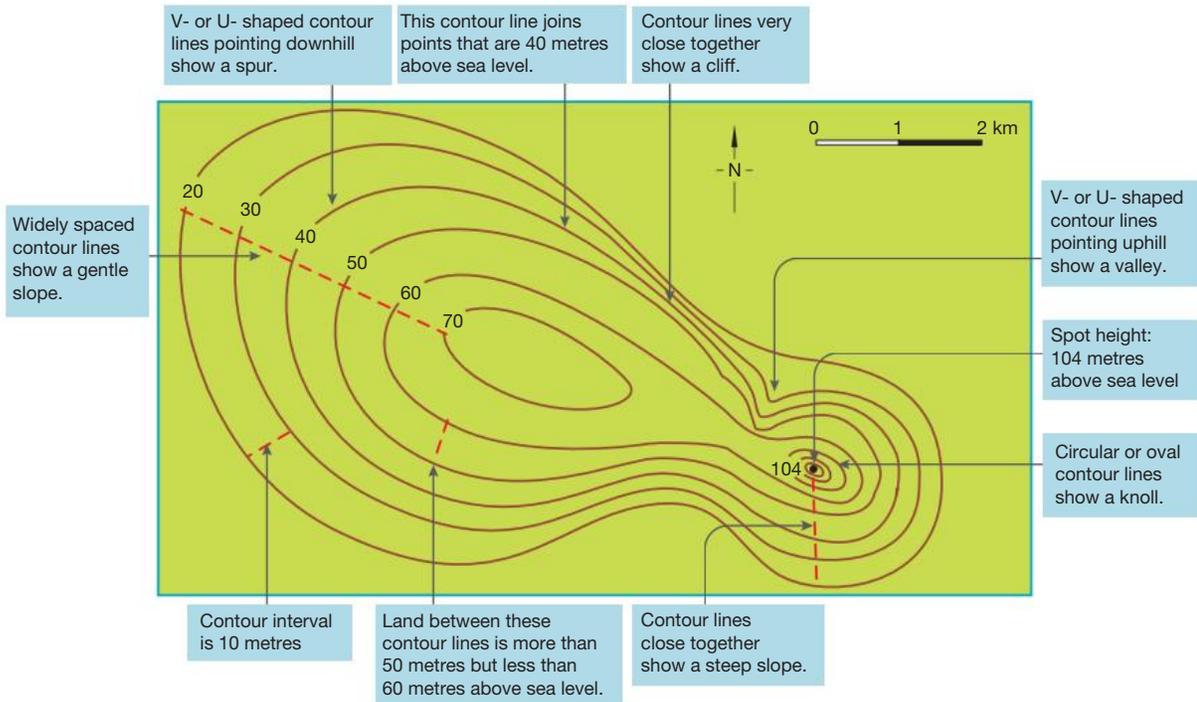
You will need:

- a contour (topographic) map.

Model

The contour lines (brown lines) on the simple topographic map shown in **FIGURE 1** join places of the same height above sea level. The contour lines are drawn at 10-metre intervals. The highest point is identified by a spot height of 104 metres. Landscape features such as steep or gentle slopes, cliffs, valleys, spurs and knolls can be identified using the contour lines on the map.

FIGURE 1 How contour lines show the shape of the land



Procedure

Step 1

To find the height of a particular area of land, identify a contour line in **FIGURE 1** and follow the line to find the number that states the height above sea level (in metres).

Step 2

Spot heights are dots that indicate the exact height at the highest point of a hill or the lowest point of a depression. For example, the hill in **FIGURE 1** is exactly 104 metres above sea level at its peak. This spot is higher than the last contour line (in this case 100 m), but lower than the height at which the next contour line would be drawn (110 m).

If the contour interval shown in **FIGURE 2** is 20 metres, what height could the land be on these hilltops?

Step 3

The contour interval of a map is the difference in metres between each of the contour lines. This interval is consistent across a map.

If the contour lines are too close and the numbers can't easily be written, it is left to the reader to use the contour interval to calculate heights. The contour interval is often written in the legend as a guide. Check your understanding by considering the landscape shown in **FIGURE 2**. With a contour interval of 20 metres, what would be the height of the land at the top of the contour immediately beneath the hilltops?

FIGURE 2 A topographic map represents a three-dimensional landscape on a flat surface.



8.3.3 Let me do it

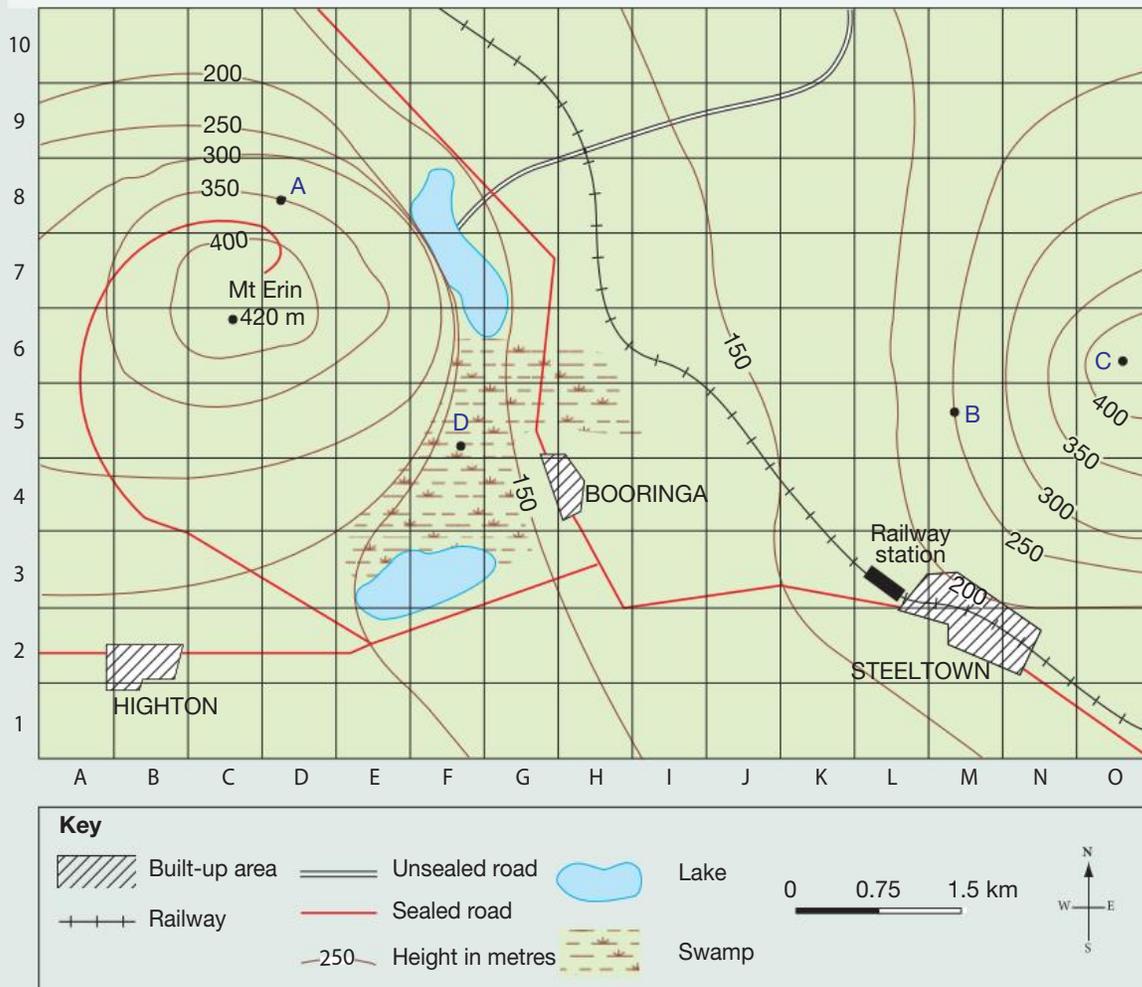
Complete the following activity to practise this skill.

8.3 SkillBuilder activity ANALYSING

Study **FIGURE 3** and apply your skills in reading contour lines to answer the following questions.

- What contour heights does the road from Highton to Booringa cross?
- Does the railway line follow fairly even land or does the train have to climb a steep slope?
- What is the contour interval on this map?
- What is the maximum height of Mount Erin at its peak?
- How would we know that Mount Erin is a hill if it was not labelled so?

FIGURE 3 A simple topographic map of Mount Erin and surrounding areas



Source: MAPgraphics Pty Ltd, Brisbane

LESSON 8.4 SkillBuilder: Drawing simple cross-sections

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **complete** a simple cross-section using a topographic map.

8.4.1 Tell me

What are cross-sections?

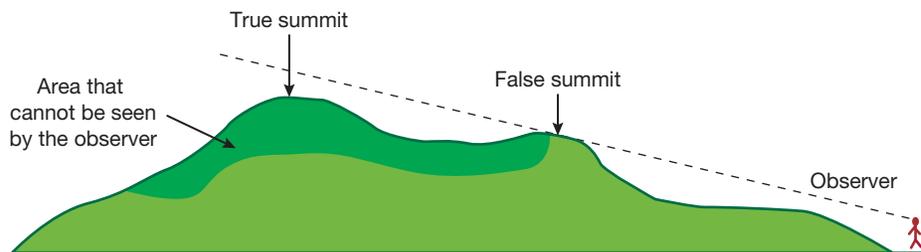
A cross-section is a side-on, or cut-away, view of the land as if it had been sliced through by a knife. It is like taking a vertical slice of the landscape and looking at it side-on. Cross-sections provide us with an idea of the shape of the land. We can use contour lines on topographic maps to draw a cross-section between any two points. Cross-sections also indicate heights at a range of points.

Why are cross-sections useful?

Cross-sections help us visualise the shape of the land between any two points. They are useful because sometimes it is difficult to visualise what topography (the shape of the land) is like when looking at a topographic map. Also, they help us determine if a landform will block the view of other landforms; for example, if a high hill obscures the view of the valley beyond and the lower range of hills. Cross-sections are also useful for:

- showing the changing shape of the land
- planning a walk or hike in a mountainous area
- planning constructions, such as houses, on sloping blocks.

FIGURE 1 Working with cross-sections



A good cross-section has:

- been drawn in pencil
- ruled axes
- labelled axes
- used small dots
- created a smooth curve
- labelled features, if necessary
- a title.

8.4.2 Show me



How to complete a cross-section

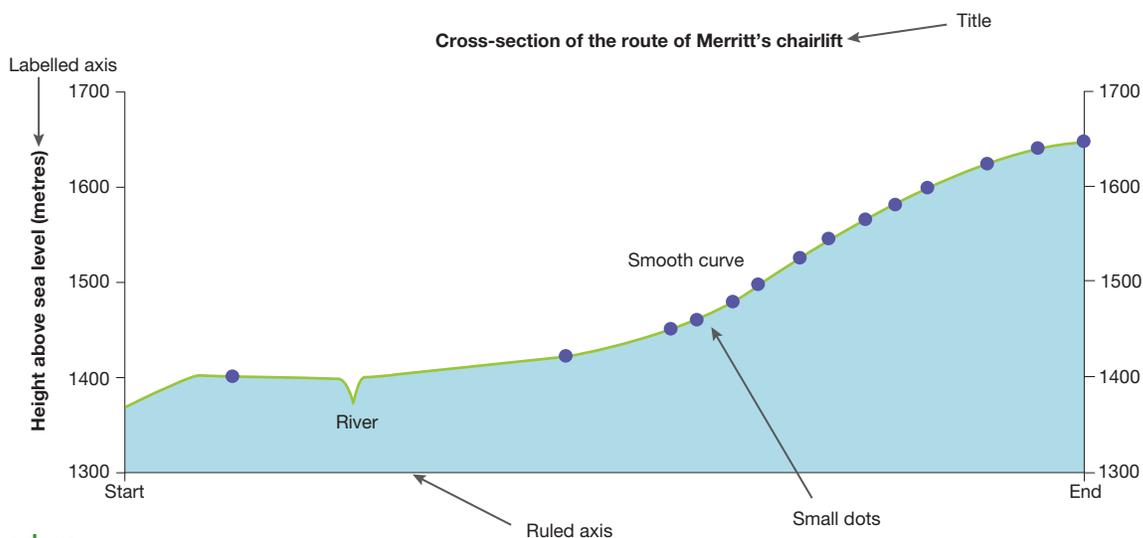
You will need:

- a topographic map of the region being considered
- a piece of paper with a straight side for marking the contours

- another sheet of paper, or graph paper, to draw the cross-section on
- a light grey pencil
- a ruler
- an eraser.

Model

FIGURE 2 A completed cross-section of Merritt's chairlift route



Procedure

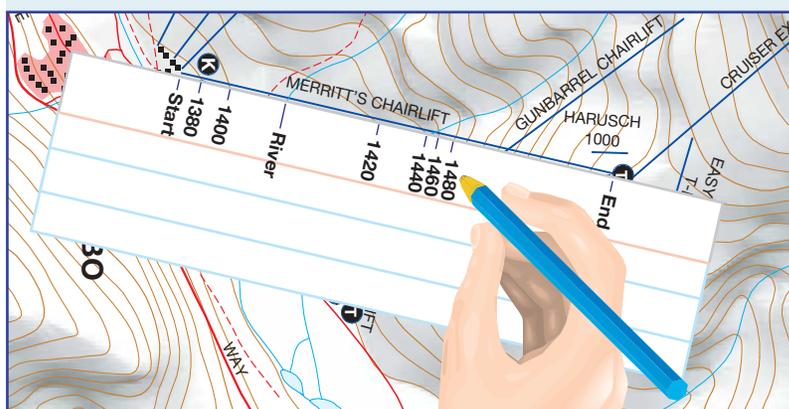
Step 1

Determine the two points between which you want to create a cross-section. Your paper edge must be long enough to reach from one point to the other.

Step 2

Place the straight edge of a piece of paper between the two points. Mark the two extremities of your cross-section on the edge. Label these 'start' and 'end' or use place names/grid references from the map.

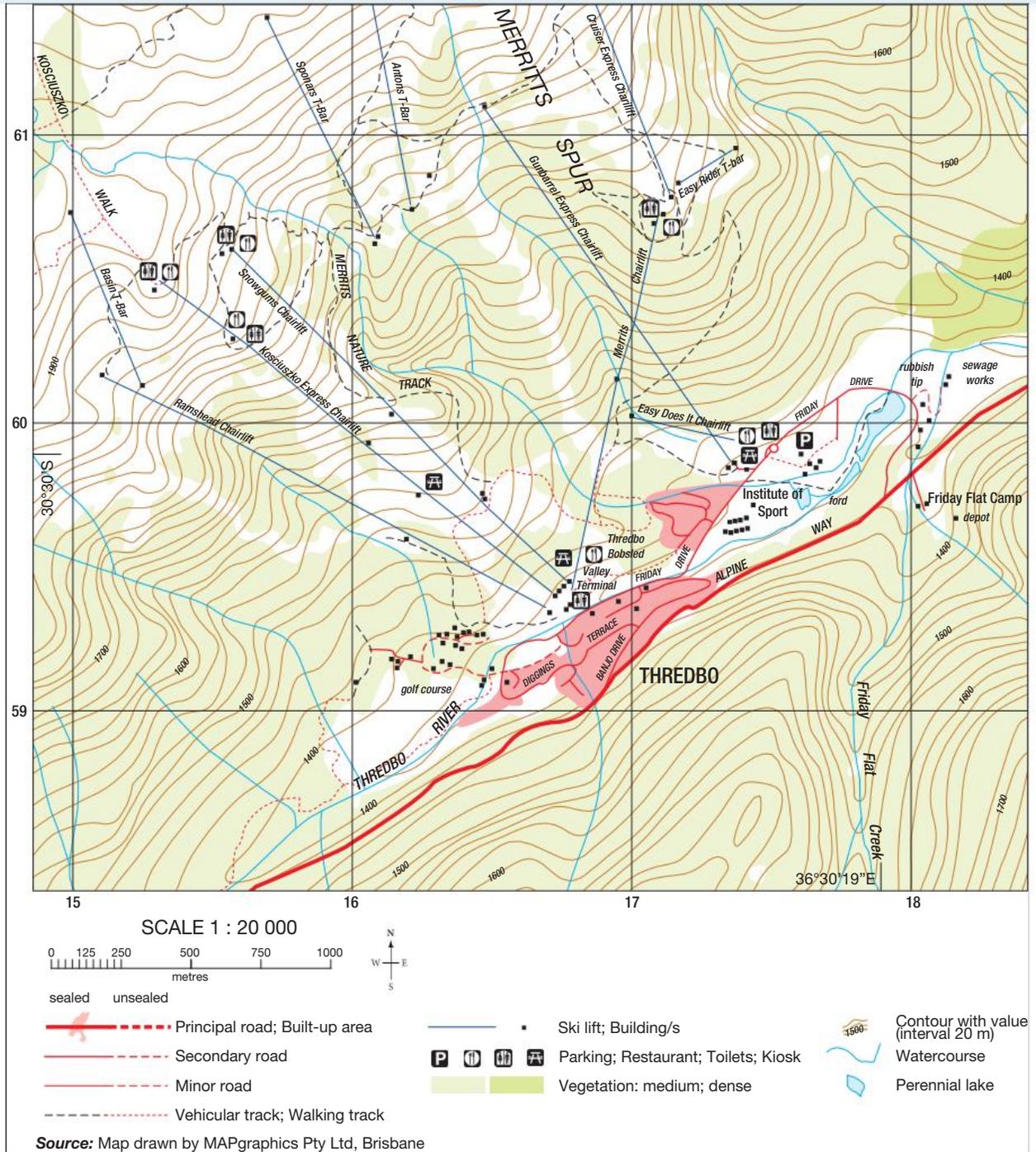
FIGURE 3 Marking up the paper edge where each contour touches the page



Step 3

On the paper, mark where each contour line touches the edge and write the height of the contour line beside each mark. It may be necessary to lift the paper edge or follow the contour line to find a number. Hold your paper firmly and lift the edges to prevent moving it off the line of the cross-section. When you have completed all the contour markings you can lift the paper away from the map.

FIGURE 4 Topographic map of Thredbo, New South Wales



Step 4

On another sheet of paper, use your ruler to draw an axis onto which to transfer your markings. The horizontal (base) line should be as long as your cross-section from 'start' to 'end'. The vertical scale needs to give a realistic impression of the slopes and landforms. For this exercise, use one centimetre to represent 100 metres.

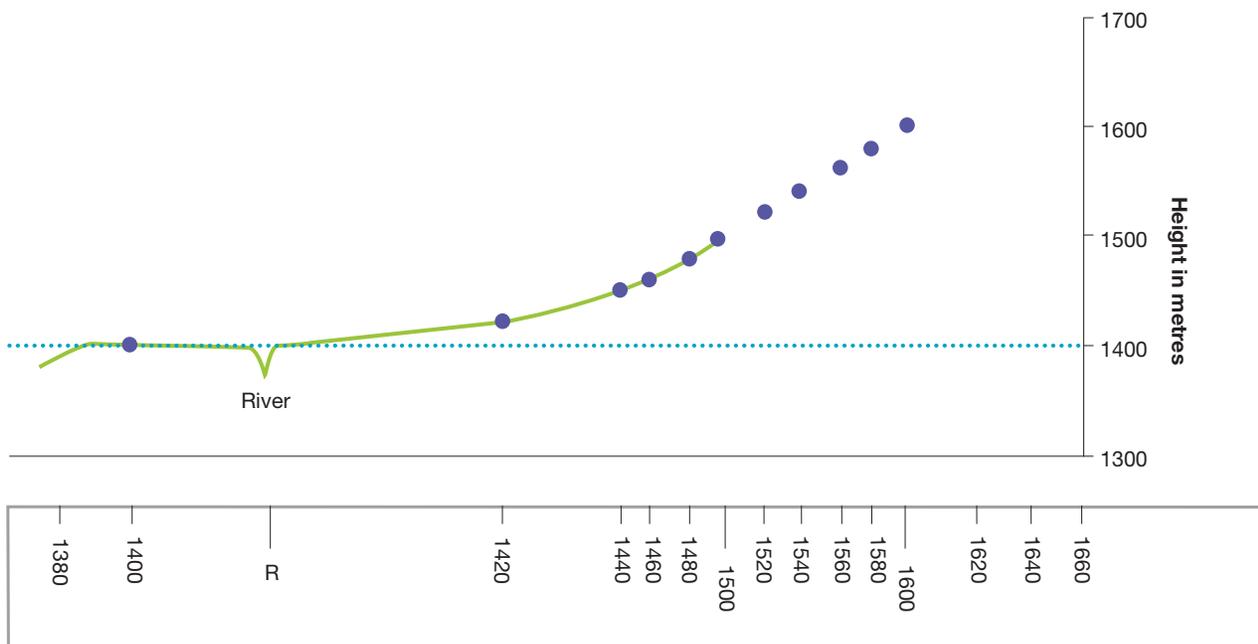
Step 5

Place the marked edge of the paper along the base axis. At each contour marking, find the appropriate height according to the vertical scale and put a small dot directly above the contour marked on the edge of the paper.

Step 6

Join the dots with a smooth line to show the slope of the land. Notice that a notch has been used to show where a river is located on the cross-section, and that the river has been labelled. Other features can be marked similarly when preparing the cross-section, if required.

FIGURE 5 Drawing the curve of the cross-section



Step 7

Complete the cross-section with the geographic conventions of a title and labelling of the axis. Shade the area below the line of your cross-section.

8.4.3 Let me do it

Complete the following activity to practise this skill.

8.4 SkillBuilder activities

ANALYSING, EVALUATING

- Using **FIGURE 6**, complete a cross-section along the line A–B. Use the checklist to ensure you have correctly completed all aspects of the task.
- Use your cross-section to answer the following questions.
 - Based on your cross-section, which side of Mount Taranaki would be the easiest to walk up? Why?
 - How high is Mount Taranaki at its peak?
 - How many watercourses are shown on the cross-section?
 - Describe the vegetation cover of Mount Taranaki along the cross-section.
 - What type of land feature is Mount Taranaki?

FIGURE 6 Topographic map of Mt Taranaki, New Zealand



Source: Topographic Map 273-09 Egmont. Crown Copyright Reserved. Map drawn by MAPgraphics Pty Ltd, Brisbane

Checklist

I have:

- used pencil
- ruled the axis
- used small dots
- created a smooth curve
- labelled the axis
- included a title.

LESSON 8.5 SkillBuilder: Constructing a field sketch

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **construct** a field sketch.

8.5.1 Tell me

What are field sketches?

Field sketches are drawings completed during fieldwork — Geography outside the classroom. Field sketches allow a geographer to capture the main aspects of landscapes in order to edit the view, focusing on the important features and omitting the unnecessary information. Field sketches are free-hand drawings with annotations. Colour may be added but is not a requirement. A field sketch aids our sense of observation and allows us to record and interpret environments.

Why are field sketches useful?

Field sketches capture the important information. You might think it is easier to take an image on your phone or with a camera, but you are then capturing the non-relevant data as well. By making a drawing in the field you are interpreting the environment, analysing the landscape and highlighting a geographical understanding of what you see by careful and clear labelling.

A good field sketch has:

- been completed on plain paper
- been drawn in pencil
- a title
- a date
- labels of key features
- an indicator to show direction
- shading.

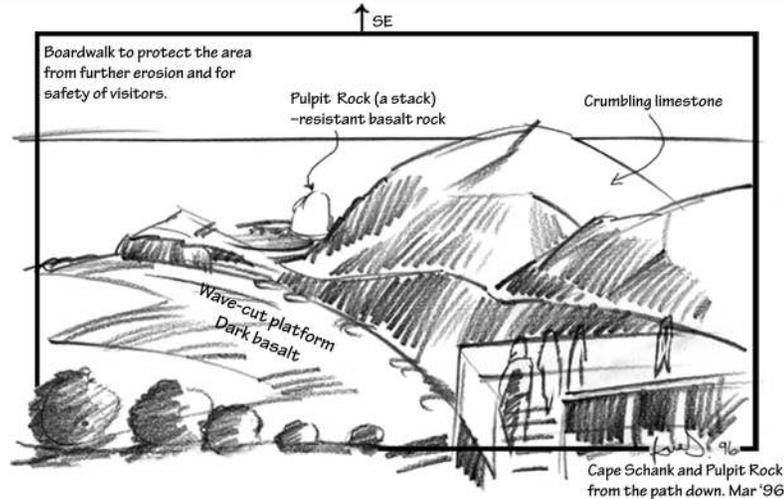
8.5.2 Show me

How to construct a field sketch

Model



FIGURE 1 Field sketch of Cape Schanck



You will need:

- plain paper
- a clipboard
- a grey pencil (soft)
- a ruler
- an eraser.

Procedure

FIGURE 1 is an example of a coastal field sketch. Obviously, to complete a coastal field sketch you need to be in a coastal environment, but any environment can be sketched — natural or human-altered. You can choose an environment near you.

Step 1

Choose the field of view to be sketched; that is, 'from this tree to that bend in the stairs'. Make yourself comfortable because you'll need to stay in the one place while you complete the sketch.

Step 2

Partly close your eyes so that you are peeking at the world — all the small details will disappear and your eyes will focus on the main outlines, which are the first parts to be drawn. Practise viewing the environment.

Step 3

Attach your paper securely to the clipboard because wind plays havoc with field sketching! Using a pencil, draw a border (frame) in which you are going to sketch. Always draw in pencil and keep your eraser handy.

Step 4

Draw in the horizon as a baseline; that is, where the land meets the sky.

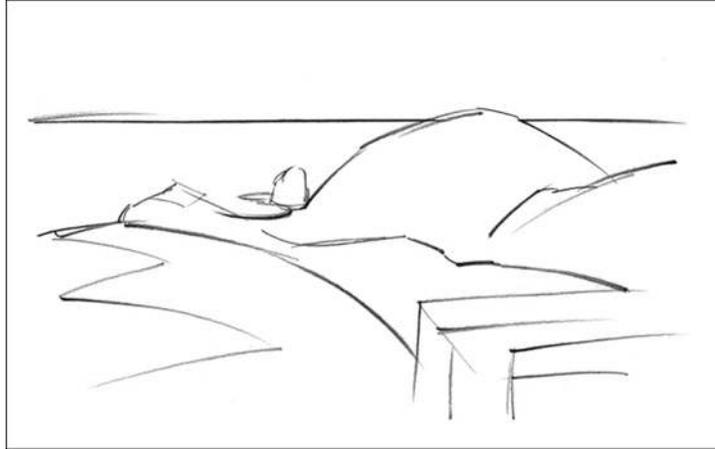
Step 5

Divide your sketch horizontally into three portions: background, middle-ground and foreground (what is closest to you).

Step 6

Peek at the landscape through partly closed eyes and now add the main outlines to your sketch. Start with main features in the background (most distant), then middle-ground and lastly foreground. There will be a few shapes on your page, but no detail (see **FIGURE 2**).

FIGURE 2 Initial outline



Step 7

Using this base you can now add details and shading. Identify those aspects that are relevant to your study. In this coastal example, there are natural features — a wave-cut platform, a stack, a headland and limestone ridges — and a human feature, the boardwalk.

FIGURE 3 Further detail shading



Step 8

Annotate (label) your sketch to draw attention to the landscape features. Ask yourself what the connection is between the natural features and the human-altered features. Can your labelling assist in making this interconnection clear to those who view your field sketch?

Step 9

Add the finishing touches.

- On the border, add a direction indicator as to which way you are looking at the landscape.
- Title your sketch — identify the place with as much detail as possible.
- Date your drawing.

FIGURE 1 shows the completed field sketch with all features added.

8.5.3 Let me do it

Complete the following activity to practise this skill.

8.5 SkillBuilder activities

QUESTIONING AND RESEARCHING

1. Your teacher may take the class into the school grounds and ask you to do a field sketch of an area within the school boundary, or you may be able to view an *environment* beyond the fence line.

OR

At home, select a street view or a garden view and complete an annotated field sketch. Use the checklist to ensure you cover all aspects of the task.

2. Study your field sketch and consider the *environment* to answer the following questions.
 - a. What natural features have been labelled in the field sketch?
 - b. What human-altered features have been labelled in the field sketch?
 - c. Is there any *interconnectedness* between the natural *environment* and human activities?
 - d. How do your five senses respond to this *environment*?
 - e. How might this *place change* in the future?

Checklist

I have:

- drawn a border
- added a compass direction
- titled the sketch
- dated the sketch
- shaded to give depth
- clearly labelled the significant aspects.

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **draw** a précis map.

8.6.1 Tell me

What is a précis map?

A précis map is a simplified map — the cartographer has decided which details to leave in and which to leave out. It is different from a sketch map, which includes all the main features.

Why are précis maps useful?

A précis map is a summary of an area. There may be just one feature shown, such as rainforest. Sometimes more features are shown, such as vegetation, urban areas and roads.

They are useful for:

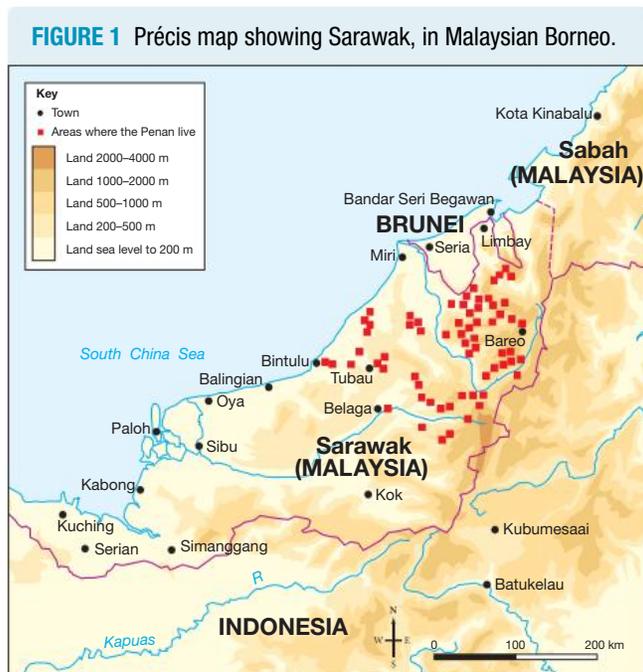
- identifying a particular feature or features, such as rainforests or residential/industrial areas of a city
- close examination of a particular feature
- focusing the reader’s attention on a feature, such as the distribution of a plant species
- showing or including detail not visible on a satellite image or aerial photograph.

A good précis map has:

- been neatly presented
- been drawn in pencil
- been coloured or shaded and includes a key
- accurately shown a feature or features
- included BOLTSS.

8.6.2 Show me

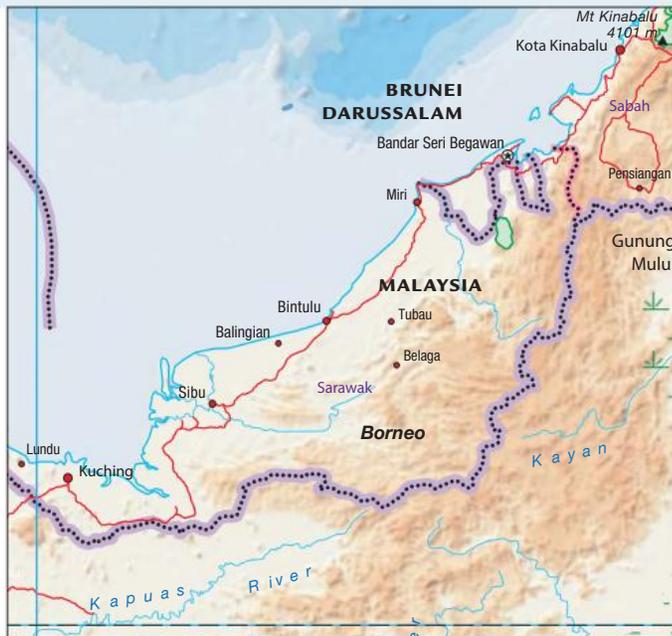
How to draw a précis map



Source: MAPgraphics Pty Ltd, Brisbane

FIGURE 1 shows four aspects — the height of the land, the major towns, the rivers and the areas where the Penan people live. The cartographer has elected to omit aspects such as transport systems and vegetation. The areas in which the Penan people live have been drawn as symbols and in no way depict the boundaries of their locations. **FIGURE 1** is a précis of the complex map in **FIGURE 2**.

FIGURE 2 Complex map showing Sarawak, in Malaysian Borneo



Source: Spatial Vision



You will need:

- a map of the region being considered
- a light grey pencil
- coloured pencils
- a ruler
- an eraser.

Procedure

Step 1

Determine the area that you want to use to create a précis map. In **FIGURE 3** this has been done by removing details for surrounding countries, so that only Sarawak is detailed.

Step 2

Rule a border on your page within which to create your map. Make this the same size as the original to avoid having to scale your drawing.

Step 3

Identify the feature/s and their extent that you are going to include on your précis map. In **FIGURE 1**, the cartographer has chosen to leave in land heights, rivers and towns, and has chosen to leave out roads and vegetation.

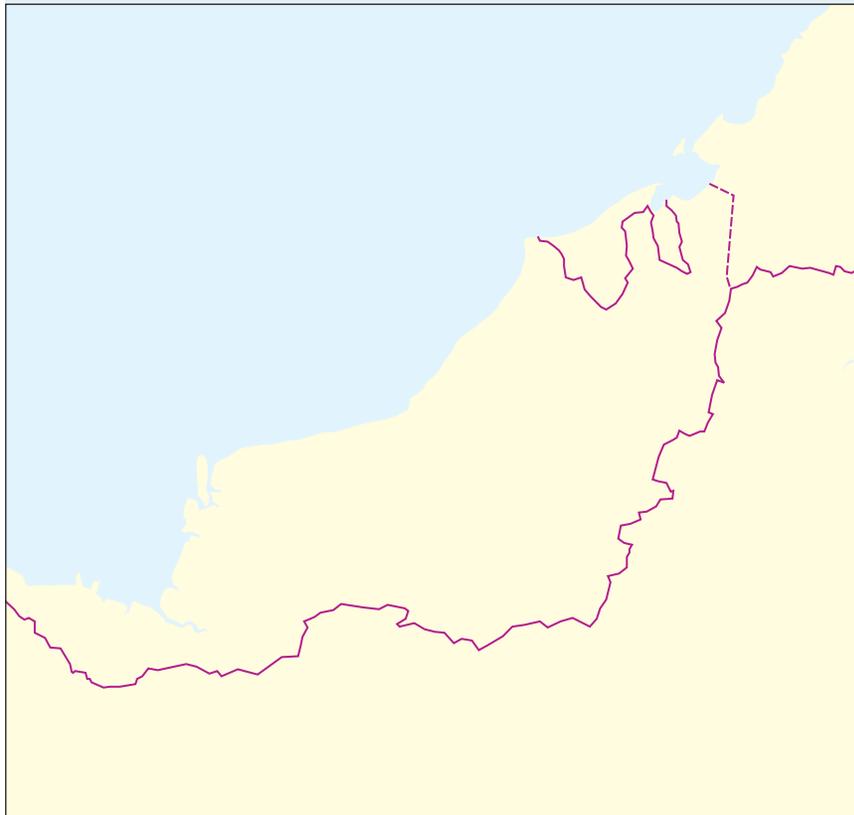
Step 4

Create a colour-coded key for each feature and place it next to or below the map.

Step 5

Within the border that you created in Step 2, draw an outline of the area that is to be mapped. Retain the scale of the original map that you are using.

FIGURE 3 Setting up the base map for the précis map



Step 6

Individually, take each of the features that you identified in Step 3 and mark on your map, in a generalised way, the area that it covers. When you have completed one feature, colour it before moving to the next feature and mark your key appropriately (see **FIGURES 4, 5, 6 and 7**). It will prevent confusion if you complete the colouring as you go, rather than leaving it all until the end.

FIGURE 4 Land heights have been added to the base map.

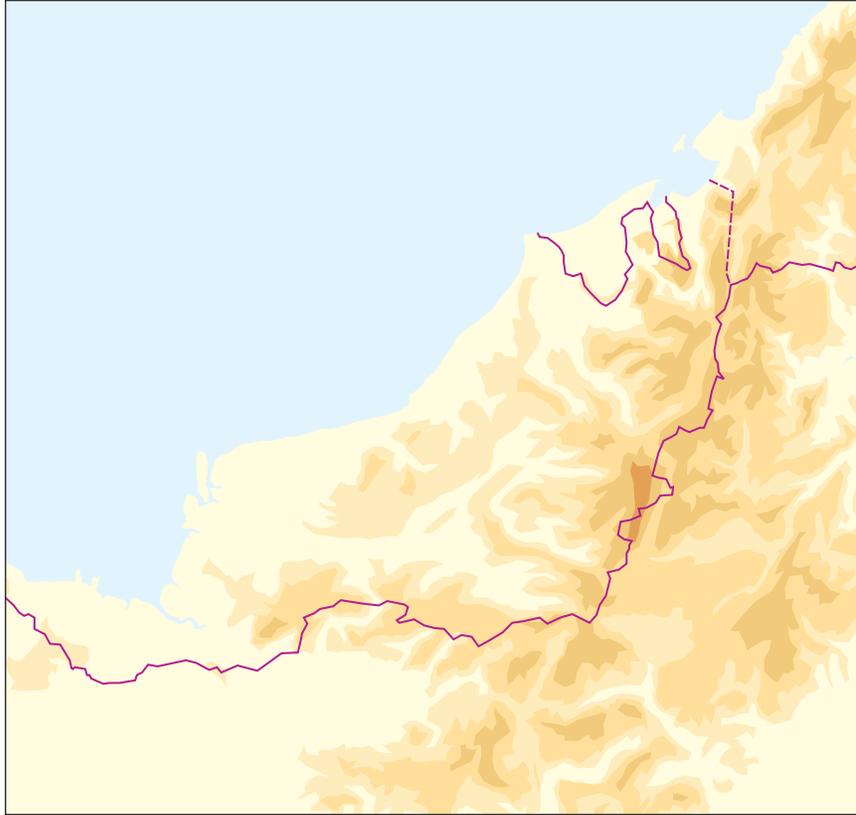
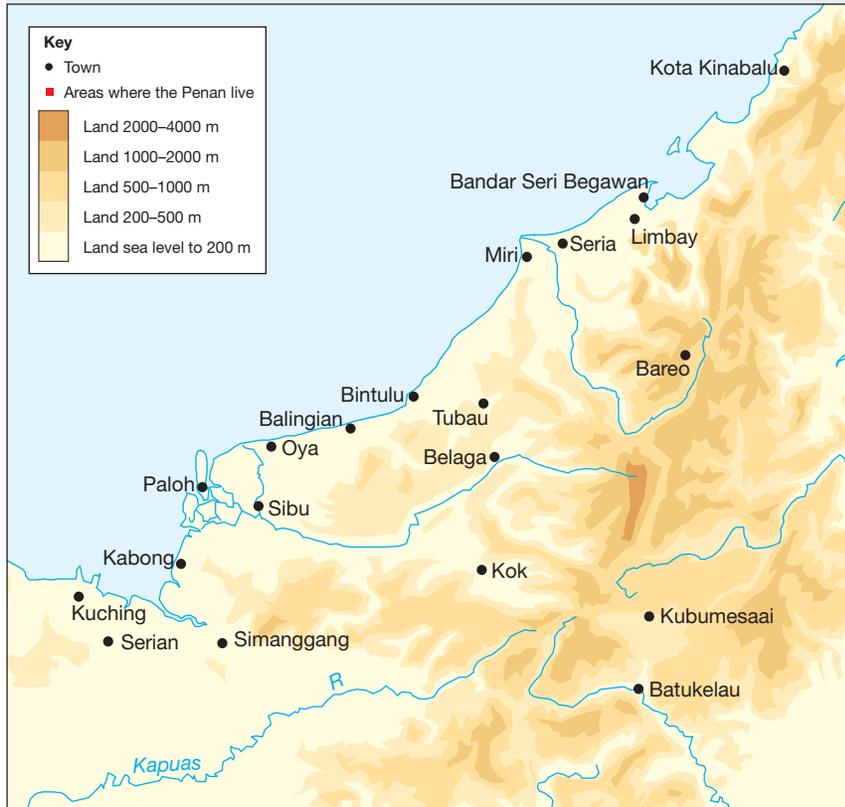


FIGURE 5 Rivers have been added to the base map.



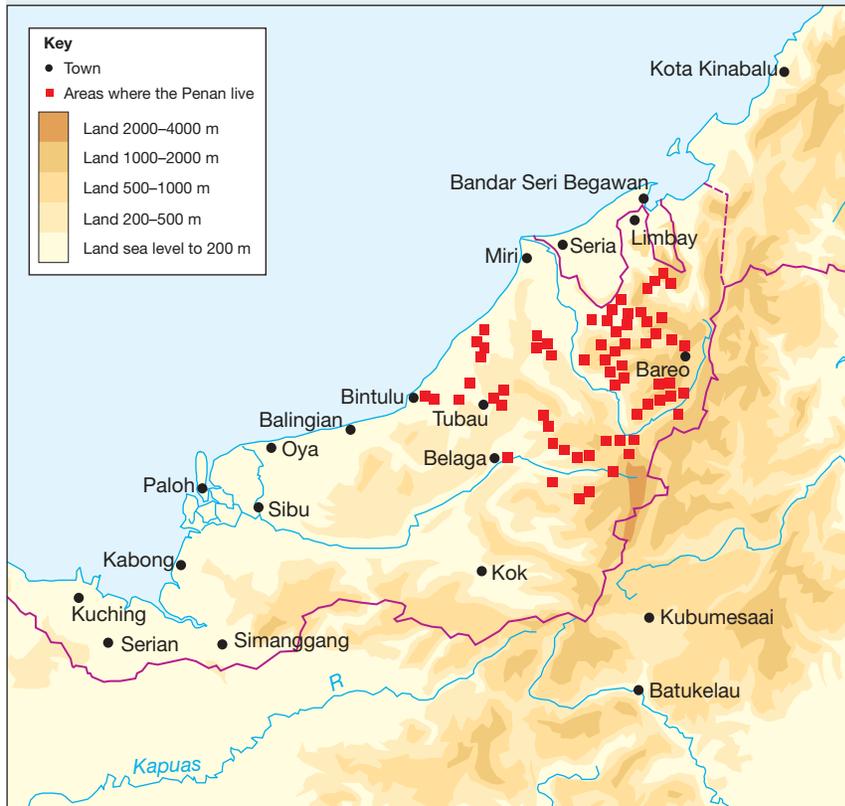
FIGURE 6 Towns have been added to the base map.



Step 7

Complete the précis map with BOLTSS.

FIGURE 7 The locations of Penan lands have been added to the base map.



8.6.3 Let me do it

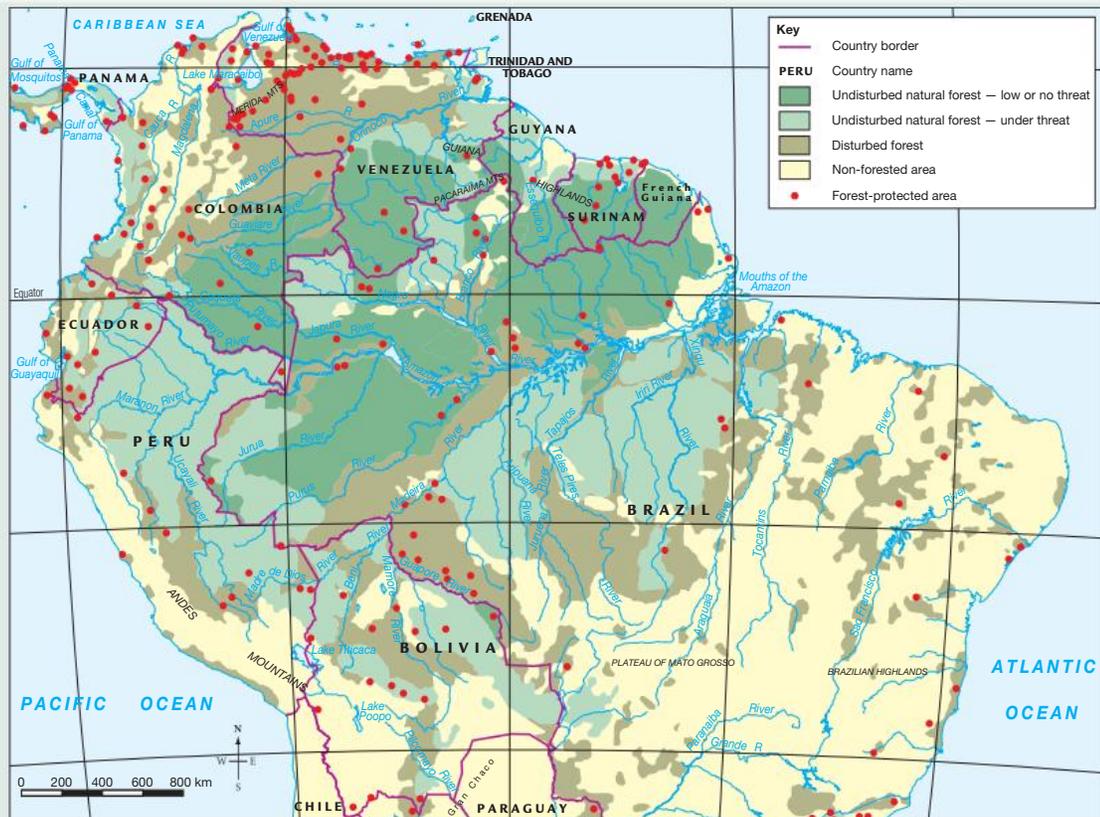
Complete the following activity to practise this skill.

8.6 SkillBuilder activities

COMMUNICATING AND REFLECTING

1. Refer to the map of the Amazon shown in **FIGURE 8**. On a separate piece of paper, create a précis map showing only the levels of deforestation. Map the outline and include the borders of countries. To show levels of deforestation, you should include the areas of undisturbed natural forest (low or no threat), undisturbed natural forest (under threat) and disturbed forest. Ensure that you complete the conventions of good mapping (include BOLTSS). Use the checklist to ensure that you cover all aspects of the task.
2. Use your completed précis map to answer the following questions.

FIGURE 8 The Amazon Basin



Source: MAPgraphics Pty Ltd, Brisbane

- a. What type of forest dominates the Amazon Basin?
- b. Is there more area of forest under threat than there is deforested area?
- c. Is there a greater area of forest under threat than there is not threatened?
- d. In which area of the Amazon Basin is the majority of the least disturbed forest?
- e. Describe the regions of the Amazon Basin where you would be most likely to see evidence of deforestation.

Checklist

I have:

- presented the information neatly
- drawn in pencil
- coloured/shaded with a key
- accurately shown a feature or features
- included BOLTSS.

LESSON 8.7 SkillBuilder: Reading and describing basic choropleth maps

online only

What is a basic choropleth map?

A basic choropleth map is a shaded or coloured map that shows the density or concentration of a particular aspect of an area. The key/legend shows the value of each shading or colouring. The darkest colours show the highest concentration, and the lightest colours show the lowest concentration.

LESSON 8.8 SkillBuilder: Comparing population pyramids

online only

What is a population pyramid?

A population pyramid is a bar graph that provides information about the age and gender of a population. The bars identify the proportion of a country's population within a particular age group. The graph is split to show information about males and females. The shape of the population pyramid tells us about a particular population.

LESSON 8.9 SkillBuilder: Creating and reading compound bar graphs

online only

What are compound bar graphs?

A compound bar graph is a bar or series of bars divided into sections to provide detail of a total figure. These bars can be drawn vertically or horizontally. The height or length of each section represents a percentage, with the total length of the bar representing 100 per cent.

LESSON 8.10 SkillBuilder: Recognising land features

online only

What are land features?

Land features are landforms with distinct shapes, such as hills, valleys and mountains. You recognise these as you look around your natural environment. On topographic maps you recognise land features from the patterns formed by the contour lines.

LESSON 8.11 SkillBuilder: Using latitude and longitude

online only

What are latitude and longitude?

Latitude and longitude are imaginary grid lines encircling the Earth. They can be drawn over a map to help us locate a place.

LESSON 8.12 SkillBuilder: Calculating distance using scale

online only

What does it mean to calculate distance using scale?

Calculating distance using scale involves working out the actual distance from one place to another using a map. The scale on a map allows you to convert distance on a map or photograph to distance in the real world — what it represents on Earth's surface. A linear scale is the easiest to use, but sometimes the distance being measured between places is not straight.

LESSON 8.13 SkillBuilder: Interpreting an aerial photo

online only

What are aerial photos?

Aerial photographs are those that are taken from above the Earth from an aircraft. Aerial photos, either oblique or vertical, record how a place looks at a particular moment in time. Greater detail of a place can be captured than in a photo taken from ground level. Some aerial photos are also satellite compilations; that is, created by a number of images transmitted from the satellite.

LESSON 8.14 SkillBuilder: Understanding thematic maps

online only

What is a thematic map?

A thematic map is a map drawn to show one aspect; that is, one theme. For example, a map may show the location of vegetation types, hazards or weather. Parts of the theme are given different colours or, if only one idea is conveyed, symbols may show location.

LESSON 8.15 SkillBuilder: Drawing a line graph using Excel

online only

What is a line graph?

A line graph is a clear method of displaying information so it can be easily understood. It is best used to show changes in data over time. In this SkillBuilder, you will develop your skills in constructing a line graph using Excel, which is a spreadsheet program. Using a digital means of drawing a line graph enables you to show multiple data sets clearly.

LESSON 8.16 SkillBuilder: Using positional language

online only

What is positional language?

Positional language uses compass points to locate places and provide directions between places. A magnetic compass will always point to north. All other directions are taken from this reference point. An 8-point compass — with points north, north-east, east, south-east, south, south-west, west, and north-west — is standard in most Geography books and atlases. A 16-point compass provides even further detail.

LESSON 8.17 SkillBuilder: Creating and describing complex overlay maps

online only

What is a complex overlay map?

A complex overlay map is created when one or more maps of the same area are laid over one another to show similarities and differences between the mapped information. All maps must be at the same scale. Laid over a base map with information that is consistent (for example, landforms), traced copies of maps showing variables (for example, population) allow you to see the elements underneath. Traditionally, the second map is on tracing paper that is attached to the original map.

LESSON 8.18 SkillBuilder: Creating and reading pictographs

online only

What is a pictograph?

A pictograph is a graph drawn using pictures to represent numbers, instead of the bars or dots that are traditionally used on graphs. Data can be drawn vertically or horizontally. Each picture is given a value.

LESSON 8.19 SkillBuilder: Describing photographs

online only

What is meant by 'describing a photograph'?

A description is a brief comment (up to a paragraph) on a photograph, identifying and communicating features from a geographic point of view. Sometimes it is necessary to infer information from a photograph; for example, a cloud of dust in an image may tell us that the climate is dry, or that the place is experiencing drought, or that some movement disturbed the soil at the time the photograph was taken.

LESSON 8.20 SkillBuilder: Constructing a basic sketch map

online only

What is a basic sketch map?

A basic sketch map is a map drawn from an aerial photograph or developed during fieldwork. It identifies the main features of an area and is different from a précis map, in which the cartographer opts to include or leave out certain features.

LESSON 8.21 Review

8.21.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

8.2 Concepts and skills in Geography

- The acronym SPICESS helps you remember the seven geographical concepts: space, place, interconnection, change, environment, sustainability and scale.
- Many occupations are linked to the study of Geography.
- New jobs are developing in the spatial sciences that use geographical tools such as GPS, GIS, satellite imaging and surveying.
- You will learn, practise and master a range of essential HASS skills, including questioning and researching, analysing, evaluating, and communicating and reflecting.

8.21.2 Key terms

change the process by which places, environments or spatial patterns alter over time. In Geography, change can be natural (like erosion or climate change) or human-made (like urban development or deforestation).

environment the natural and human surroundings in which people, plants and animals live, including ecosystems, landscapes, and built environments.

interconnection the way people, places and environments are linked to each other through natural processes, trade, migration, culture and technology.

place a specific location on Earth that has unique physical and human characteristics, making it meaningful to people.

sustainability the responsible use and management of resources to meet current needs while ensuring future generations can also meet theirs.

space how features and places are arranged on Earth's surface; where things are located, how they are distributed, and the patterns they form

scale the ratio that shows how much smaller a map is compared to the real world, e.g. one centimetre on a map equals one kilometre in real life

8.21.3 Reflection

Complete the following to reflect on your learning.

Revisit the Inquiry question posed in the Overview.

Why is Geography important to study, and what skills do I need to understand Geography?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

learn on

 **eWorkbooks** Customisable worksheets for this topic
Reflection

 **Digital document** Key terms glossary

8.21 Review exercise

Learning pathways

LEVEL 1

3, 7, 11, 12

LEVEL 2

1, 2, 5, 6, 9, 13

LEVEL 3

4, 8, 10, 14, 15

REMEMBER AND UNDERSTAND

1. Identify what the acronym SPICES stands for in Geography.
 - A. Space, Place, Interconnection, Change, Environment, Sustainability, Scale
 - B. Space, Population, Interaction, Climate, Ecosystem, Sustainability, System
 - C. Soil, People, Integration, Change, Ecosystem, Species, Scale
 - D. Space, People, Interaction, Climate, Environment, Sustainability, Scale
2. From the following, identify the word that is *not* part of the SPICES framework in Geography.
 - A. Space
 - B. Population
 - C. Place
 - D. Sustainability
3. Geography primarily focuses on:
 - A. exploring space.
 - B. understanding the world's environments and human interactions.
 - C. creating maps.
 - D. studying historical events.
4. The analysing skill is best described as:
 - A. memorising facts and figures.
 - B. investigating geographical questions by gathering and analysing data.
 - C. making creative representations.
 - D. listening to oral histories.
5. From the following, identify the essential tool used by geographers to study the world.
 - A. Books
 - B. Maps
 - C. Computers
 - D. Photographs
6. Maps provide detailed information primarily about:
 - A. species distribution.
 - B. locations and spatial relationships between places.
 - C. weather patterns.
 - D. historical events.
7. When producing maps, geographers typically:
 - A. draw by hand or use digital tools.
 - B. paint abstract representations.
 - C. sculpt terrain models.
 - D. use photographs exclusively.
8. The primary reason geographers use maps is to:
 - A. navigate from place to place.
 - B. document cultural history.
 - C. interpret spatial patterns and relationships.
 - D. develop artistic representations.
9. To fully engage with geography, one must develop:
 - A. practical analytical skills.
 - B. advanced artistic abilities.
 - C. physical fitness skills.
 - D. drawing and painting techniques.

10. What is the main value of studying geography?
- A. To learn the capitals of the world
 - B. To understand the physical world, its people and their interactions
 - C. To improve artistic creativity
 - D. To develop navigational skills

ANALYSE AND APPLY

11. **Explain** the importance of geography in understanding the world's environmental and societal dynamics.
12. **Explain** how the concept of 'space' in geography helps explain the distribution of people, resources and environments.
13. **Distinguish** between the concepts of 'environment' and 'sustainability' within a geographical context.

EVALUATE AND COMMUNICATE

14. **Assess** the role of technology in geographical research and data collection.
15. **Discuss** how geographical skills can be applied to real-world scenarios, and how they assist in everyday decision-making.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson should will be able to **read**, **understand** and **describe** a basic choropleth map.

8.7.1 Tell me

What is a basic choropleth map?

A basic choropleth map is a shaded or coloured map that shows the density or concentration of a particular aspect of an area. The key/legend shows the value of each shading or colouring. The darkest colours show the highest concentration, and the lightest colours show the lowest concentration.

Why are basic choropleth maps useful?

A basic choropleth map is used to show particular aspects in a pictorial way. They allow the viewer to quickly identify where the values are highest (darkest) and lowest (lightest) and note any patterns over space. However, the information is based on averages and precise data is not given for a particular place or region within the map. Areas can contain within them wide variations from the average value mapped. An atlas will have a wide range of choropleth maps.

Basic choropleth maps are useful for showing:

- differences between the highest and lowest concentrations of aspects
- average rainfall across a country
- average population densities per region
- average wealth per country
- average number of cars per household in local council areas.

A good description of a basic choropleth map is achieved if:

- an overall pattern is described
- the highest concentration is identified
- the lowest concentration is identified
- any anomalies are stated
- quantification is used wherever possible.

8.7.2 Show me

How to read and describe a basic choropleth map

You will need:

- a basic choropleth map.

Model

The population density across Brazil (see **FIGURE 1**) varies considerably from the coast to the inland regions. The population density is greatest (more than 100 people per square kilometre) along the Atlantic Ocean coast, especially in the largest cities. For a distance of about 700 kilometres from the coast, the population density is generally around 50 people per square kilometre. The large inland area of Brazil has a low population density of fewer than 10 people per square kilometre.

Procedure

Step 1

Read the title of the map to get an impression of what the map is going to show you. Check that the source of the information is a recognised authority. If the source is not stated, check the list of acknowledgements for the textbook to find out where the information came from.

Step 2

Read the key/legend. Check the units of measurement that are used. Think about the divisions that are used for colours. The darker the colour, the more intense or higher the value; similarly, the paler the colour, the less intense or lower the value. Cast your eye over the map, taking in the colours and trying to work out any general patterns that emerge.



Step 3

To interpret the colours, you need to comment on where the darkest colours or the more intense/higher values occur. Can you discuss the map by continent, or by region? For example, the highest density of people in Brazil occurs in the cities, such as São Paulo and Fortaleza, on the Atlantic Ocean coastline.

Step 4

To further interpret the colours, you need to comment on where the lightest colours or the least intense/lowest values occur. Can you discuss the map by continent or by region? For example, the lowest density of people in Brazil occurs in the large inland region, especially along and around the Amazon River and its tributaries.

Step 5

Are there any coloured areas that stand out from the rest as being unusual? That is, is there a colour among a mass of another colour that isn't expected? This is referred to as an anomaly, and needs to be discussed. Identify the place that is different from the surrounding area. For example, the population densities around Brasília and Goiânia are unusual because these appear to be isolated clusters of higher populations, whereas most of the surrounding area contains fewer than ten people per square kilometre.

8.7.3 Let me do it

Complete the following activity to practise this skill.

8.7 SkillBuilder activity

QUESTIONING AND RESEARCHING

Read and interpret **FIGURE 2**, a basic choropleth map of Australia's annual rainfall distribution, by answering the following questions. Use the checklist to ensure you cover all aspects of the task.

- Which region(s) of Australia has a pattern indicating the highest rainfall? Provide statistics or numbers (quantification) in your answer, such as percentage (%), size or area (square kilometres, km²).
- Which region(s) of Australia has a pattern indicating the lowest rainfall? Include quantification in your answer.
- Are there any *places* that do not fit the expected pattern? State the locations of these anomalies.
- Which Australian state receives the most rainfall?
- Give two reasons why large parts of Australia have low rainfall.

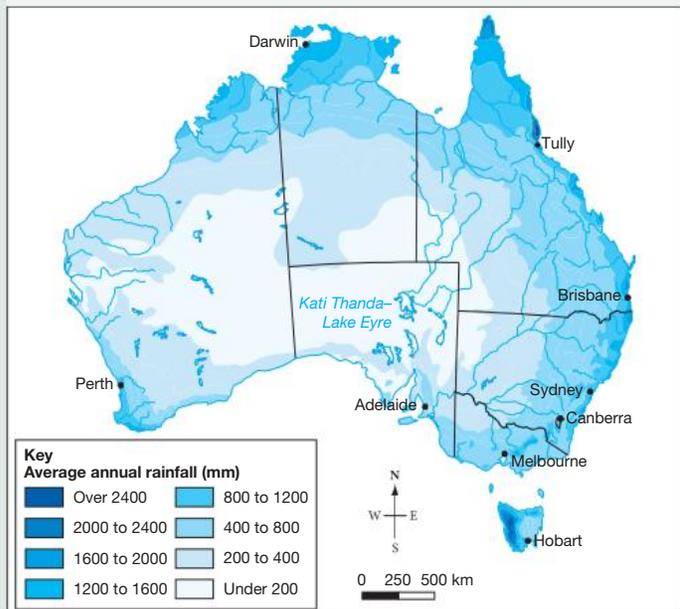
Geography concept: Interconnection

Checklist

I have:

- described an overall pattern
- identified the highest concentration
- identified the lowest concentration
- stated any anomalies
- used quantification wherever possible.

FIGURE 2 The distribution of annual rainfall in Australia



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

LESSON 8.8

SkillBuilder: Comparing population pyramids online only

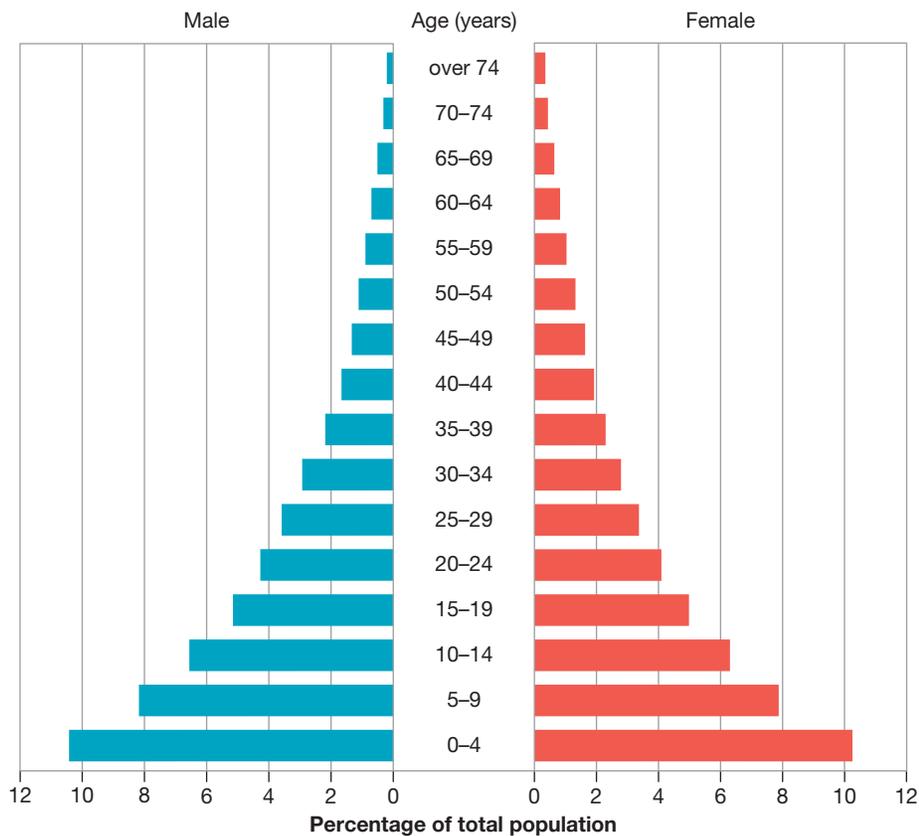
LEARNING INTENTION

By the end of this lesson you will know what a population profile is, why these are useful, and be able to compare two population profiles from different countries.

8.8.1 Tell me

What is a population pyramid?

FIGURE 1 A global population pyramid showing the percentage of males and females



A population pyramid is a bar graph that provides information about the age and gender of a population. The bars identify the proportion of a country's population within a particular age group. The graph is split to show information about males and females. The shape of the population pyramid tells us about a particular population.

Why are population pyramids useful?

Population pyramids help us to interpret and understand a list of statistics. Patterns are easily identified and compared. A triangular shape, widest at the base, as in **FIGURE 2**, indicates rapid population growth.

A square shape, as in **FIGURE 3**, shows slow growth. An inverted triangle, as in **FIGURE 4**, suggests negative growth — the population is decreasing.

A population pyramid shows us the structure of a population.

- Wide lower bars indicate a young population (that is, there is a larger proportion of young people than older people in the population).
- If the upper bars of the pyramid are wide, the population is ageing.
- Comparisons can be made of the numbers of males and females within a population.
- Indents in the shape may be due to significant events, such as war, disease, emigration or natural disasters.
- Expansions ones may result from factors such as immigration, changes in birth control laws, or the ending of a war.

FIGURE 2 Population profile of Niger, 2009

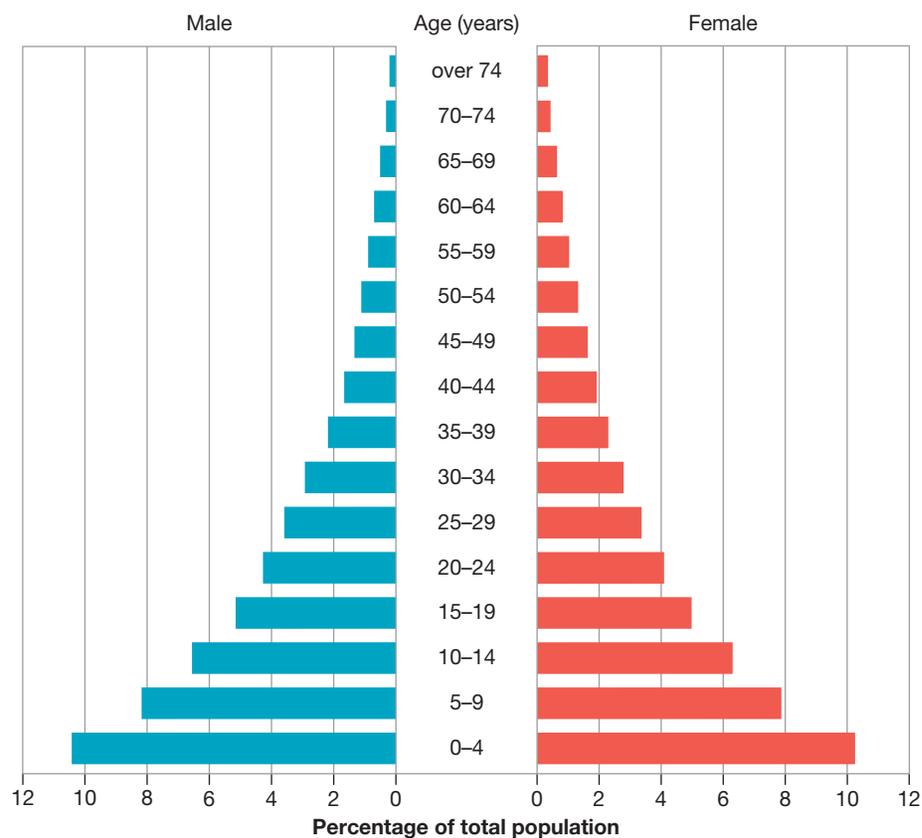


FIGURE 3 Population profile of Germany, 2009

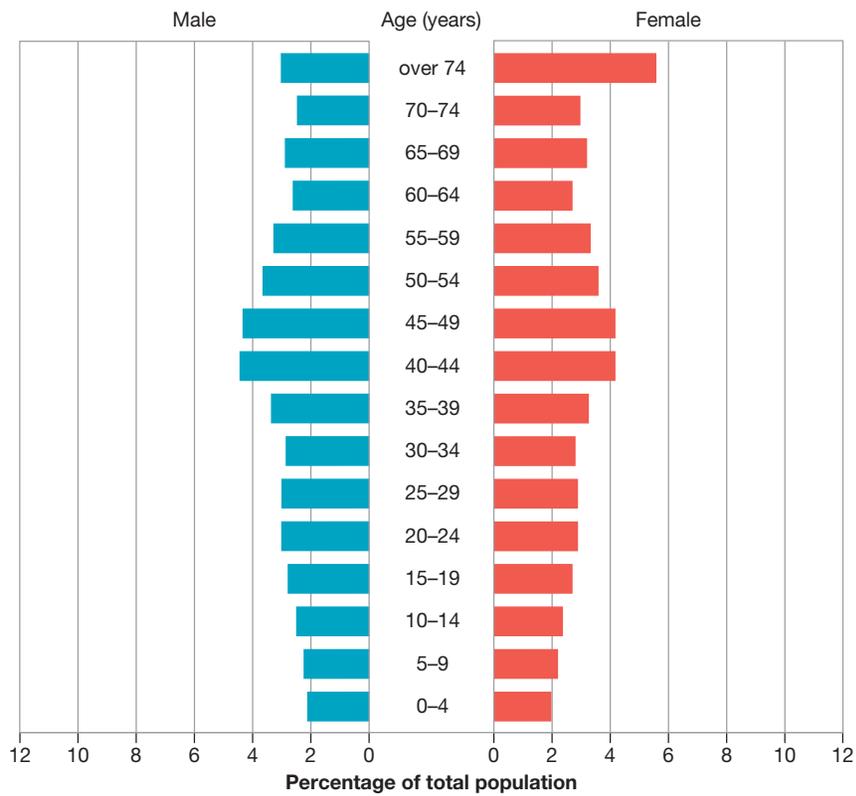
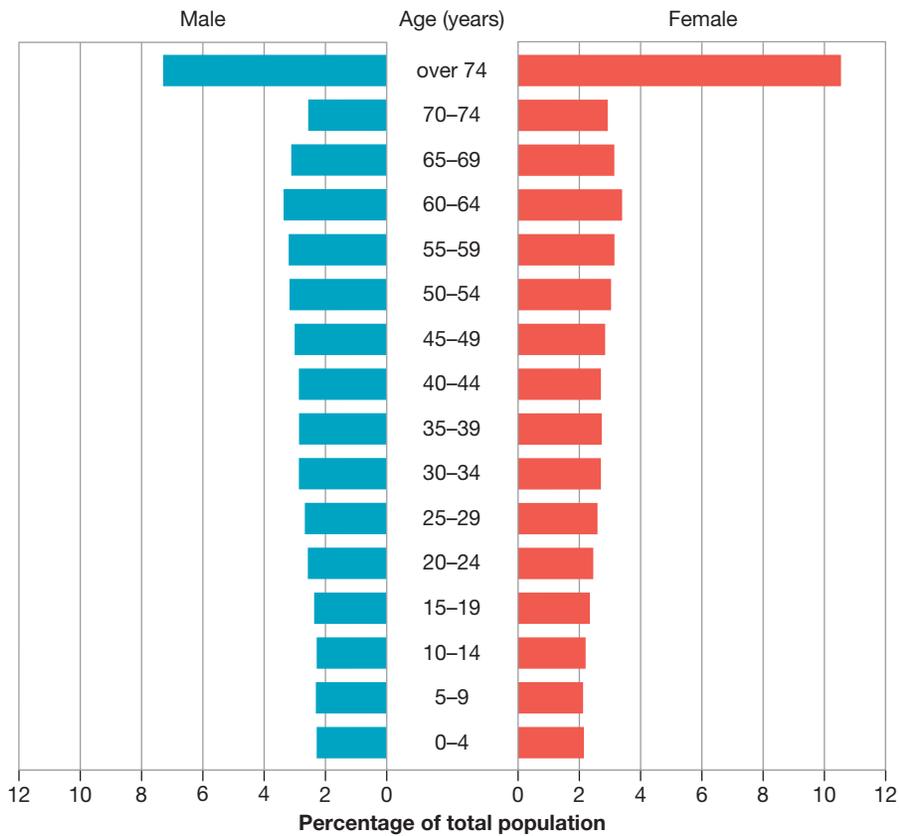


FIGURE 4 Projected Population profile of Germany, 2050



Population pyramids are useful for:

- comparing populations of different countries or places
- planning future urban developments
- determining the facilities required in an area; For example, a wider bar for the 5-14 years age group means more schools will be needed, while a wider bar for the 60+ years age group indicates a need for aged care facilities. Governments can also use them to plan services for the future.
- planning by governments for services for the future.

8.8.2 Show me

How to compare population profiles

You will need:

- two population pyramids to compare — these can be for the same place at different times, or for two different places at the same time, such as in **FIGURES 5(a)** and **(b)**.

Model

In **FIGURE 4(a)**, Indonesia's population pyramid does not fit a triangular shape; it is not very wide at the bottom, suggesting that it has relatively fewer young people and an ageing population. The profile of Vanuatu is widest at the base (the 0–4 years age group) and tapers in a triangular shape, indicating that it has a youthful population. Vanuatu will have to consider the needs of its population carefully in the future.

In Vanuatu, 41.8 per cent of the population can be regarded as dependent (very young or very old), but in Indonesia the dependent population makes up 32.5 per cent of the population. People in Vanuatu's population can be expected to live into their 70s, whereas those in Indonesia can expect to live into their 80s.

In Vanuatu, the gender balance is skewed to males (the bars show that the male population is slightly larger than the female population in most age groups), whereas in Indonesia the numbers are more evenly balanced (although the proportion of females increases in the 60+ years age group).

Procedure

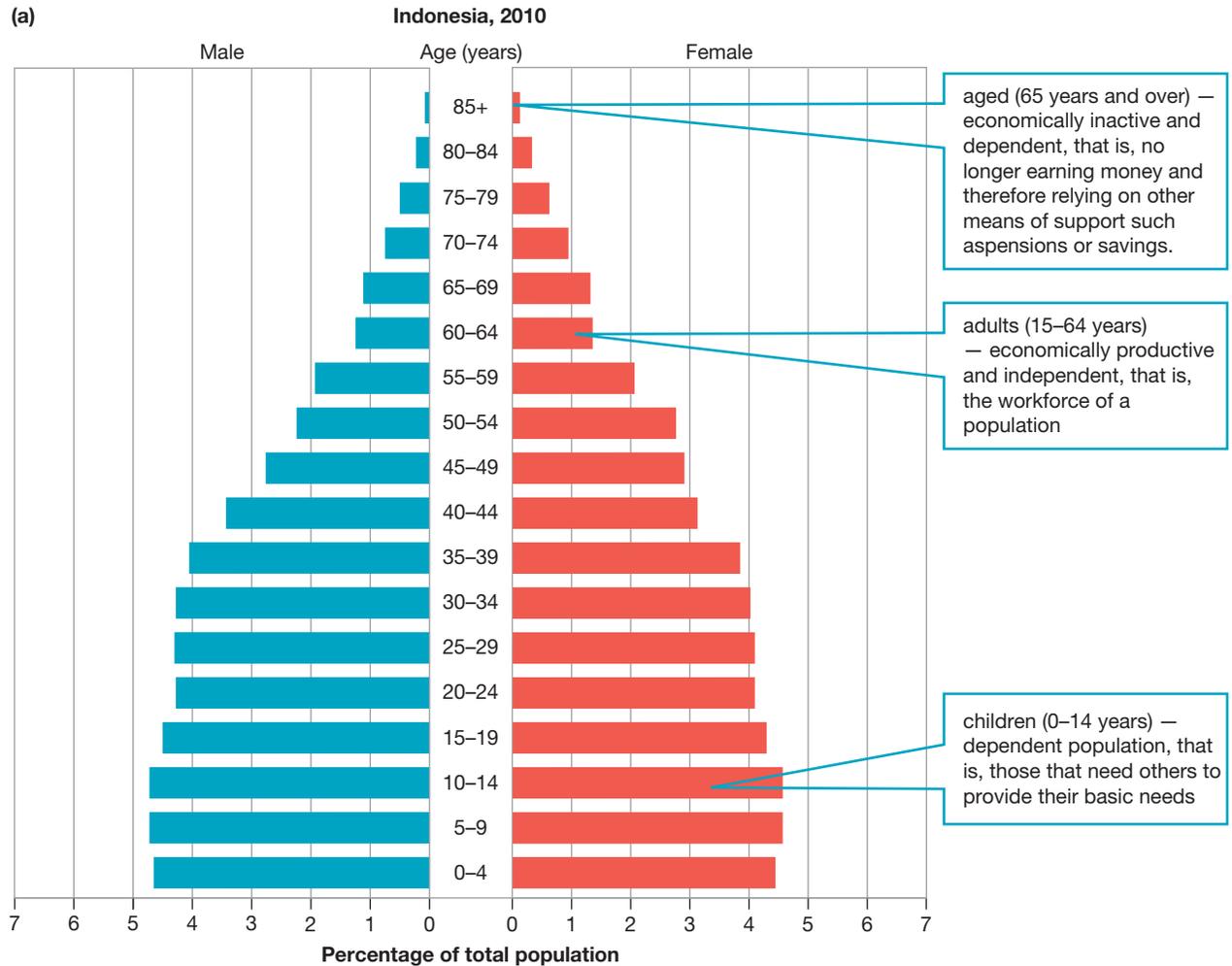
Step 1

To complete a comparison of population profiles, you must have two or more population profiles for the same place at different times, or for different places at the same time. For this example, we will use the population profiles for Indonesia and Vanuatu shown in **FIGURES 5(a)** and **(b)**.

Step 2

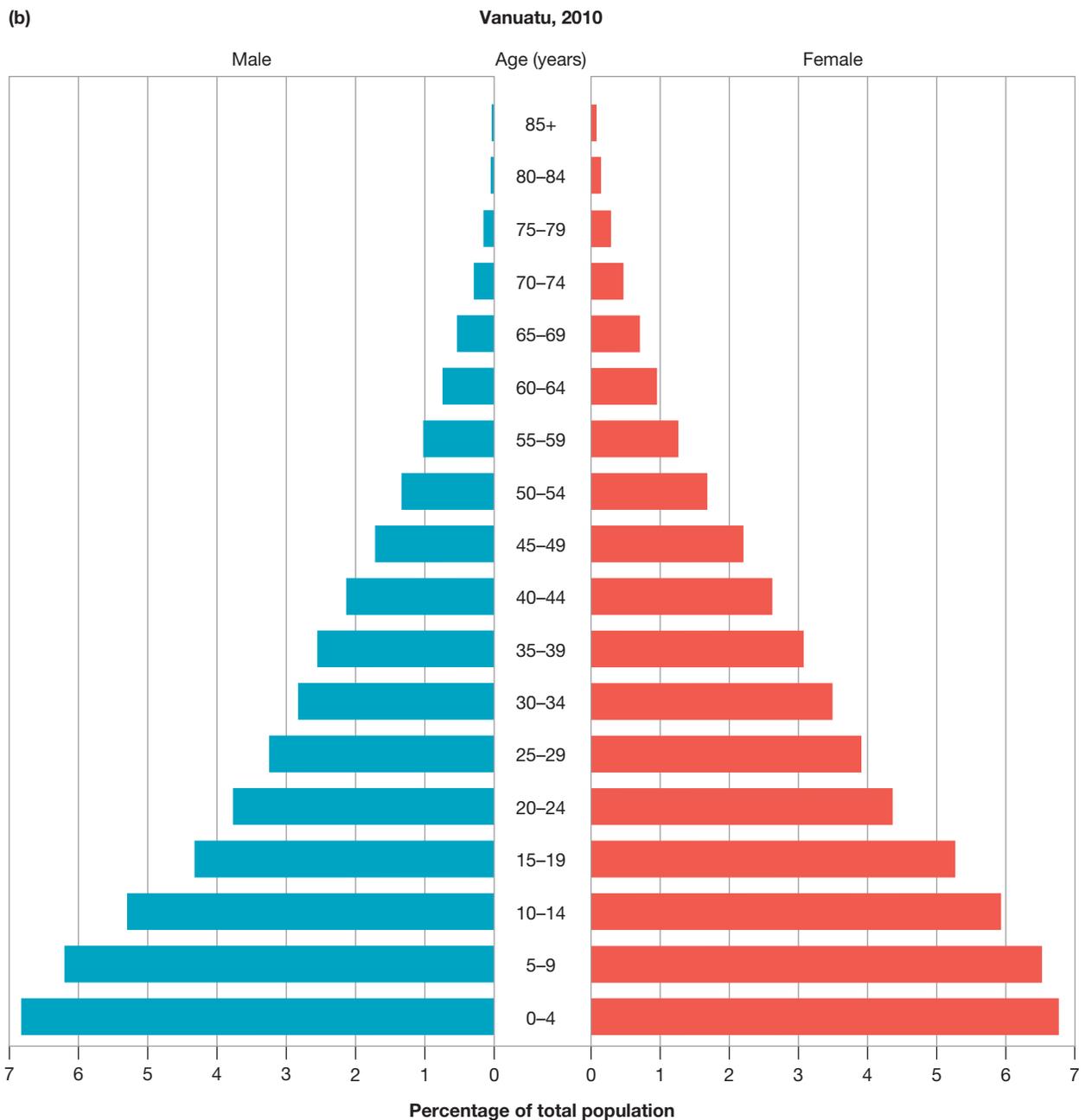
Populations can be broadly grouped into three categories according to the level of dependence of the age group:

FIGURE 5 Population profiles of (a) Indonesia and (b) Vanuatu, 2010



(continued)

FIGURE 5 Population profiles of (a) Indonesia and (b) Vanuatu, 2010 (continued)



Calculate the percentage of males and females in each category

You can do this by using the **Population pyramid** weblink in the Resources panel and selecting the country and year that you want to research. Calculate the total population in each of the three categories of dependence.

Step 3

Look for patterns in each population profile. Examine the gender structure. Is it balanced? Write a statement about the balance. Are the profile shapes similar? If not, where do variations appear? Summarise your findings, considering factors like economic development and education programs.

Are the profile shapes for Indonesia and Vanuatu similar? If not, at what age groups do the variations appear? Write a few statements to summarise your findings. Some key points you could cover include Vanuatu's economic development and Indonesia's mass education and family planning programs of the 1990s.

Step 4

Consider unusual aspects. Are there indents or extended age groupings? Research the country's history to explain unusual changes. Economic and historical events can explain these patterns. When economic times are tough, fewer children are born; when times are good, families are larger. Research the history to interpret population figures accurately.

8.8.3 Let me do it

8.8 SkillBuilder activity ANALYSING

- Using online resources, find the current-year population profile for South Africa and compare it with the current-year population profile for Thailand. Write a paragraph about population structure (using the steps in section 12.4.2 'Show me' to help you).
 - In your comparison, you need to:
 - identify** the three categories of level of dependence
 - include quantification (numbers) from the population profile
 - identify** and use male population and female population numbers
 - compare** the total populations in each gender.
- Apply your skills by answering the following questions.
 - What percentage of people in Thailand are aged less than 10 years? Compare this with the figure for South Africa.
 - In which country, South Africa or Thailand, is a female most likely to live longer?
 - Which population profile is narrowest in the 0–4 years age group?
 - At what point does the population structure for South Africa take on a pyramid shape?
 - Which country, South Africa or Thailand, is likely to have more people in the workforce in 2025? Give reasons for your answer.

LESSON 8.9 SkillBuilder: Creating and reading compound bar graphs online only

LEARNING INTENTION

By the end of this lesson you should be able to **communicate** and **present** information using a compound bar graph.

8.9.1 Tell me

What are compound bar graphs?

A compound bar graph is a bar or series of bars divided into sections to provide detail of a total figure. These bars can be drawn vertically or horizontally. The height or length of each section represents a percentage, with the total length of the bar representing 100 per cent.

Why are compound bar graphs useful?

Compound bar graphs show at a glance the various components that make up the total. For example, it might show the origin of tourists arriving in a country. In this case, each part of the compound bar would allow the reader to visually interpret what percentage of tourists came from each country of origin.

Compound bar graphs are useful for:

- showing the proportion of sectors within a total
- comparing sets of data between places
- comparing sets of data over time
- accurate interpretation of comparisons.

A good compound bar graph has:

- been drawn in pencil
- ruled lines to clearly represent and communicate data
- used colour according to a key
- a scale
- provided the source of the data
- a clear title.

A good interpretation of a compound bar graph has clearly represented and communicated the data.

8.9.2 Show me

How to create and interpret a compound bar graph

You will need:

- a set of data including parts that make up a total figure of 100 per cent
- a piece of paper on which to draw a graph — preferably graph paper
- a light grey pencil
- a ruler
- coloured pencils
- a calculator.

Model

FIGURE 1 clearly shows that the greatest percentage (60 per cent) of the world's population lived in Asia in 2011. Africa was the second most populated continent, with 15 per cent of the population. Europe was home to fewer people than Africa, with 11 per cent of the population. North and South America combined contained fewer people (14 per cent) than Africa. Oceania, including Australia, was home to a very small percentage of the world's population (0.5 per cent).

FIGURE 1 Compound bar graph illustrating the 2011 world population figures from **TABLE 1**

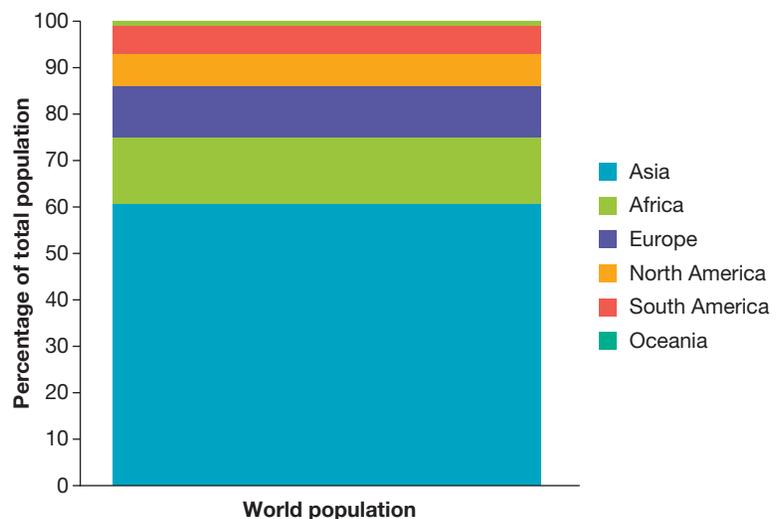


TABLE 1 World population, 2011

Region	Population	Percentage of total
Asia	4 140 336 501	60.7
Africa	994 527 534	14.6
Europe	738 523 843	10.8
North America	528 720 588	7.7
South America	385 742 554	5.7
Oceania	36 102 071	0.5
Total	6 823 953 091	100

Procedure

To complete a compound bar graph, you must have a set of data that totals 100 per cent, with detailed information about how that total is made up.

Step 1

Decide on a width (x-axis) and length (y-axis) for the bar graph — this will depend on the amount of space available and the complexity of the data being graphed. The x-axis width is not particularly important, but it is easier if the length is easily divided into hundredths (where each division equals 1 per cent). The easiest length to work with is 10 centimetres (100 millimetres). This means that each millimetre represents 1 per cent, or 10 millimetres represents 10 per cent.

Draw your y-axis 10 centimetres long. Add a scale alongside the axis (see **FIGURE 2**).

Step 2

Look at the set of data and use a calculator to convert the data into percentages of the total, if necessary. To do this, divide the figure for any part (for example, from **TABLE 1**, Oceania's population, 36 102 071) by the total figure (total world population, 6 823 953 091) and multiply the result by 100. Check your data before you begin to graph. The percentages you have should add up to 100 per cent (see **TABLE 1**). You don't want to finish colouring your bar and find that one data piece won't fit.

Step 3

Since this is a compound graph, all numbers compound (add onto) one another. Mark on your graph the length of the section of bar representing your first piece of data as a percentage. For example, 60.7 per cent = 60.7 millimetres if your total bar length is 100 millimetres. Colour this segment and add a key near your graph, with appropriate labelling (see **FIGURE 3**). Data will usually be graphed in order from the largest to the smallest.

FIGURE 2 Draw your y-axis so that the total length represents 100 per cent.

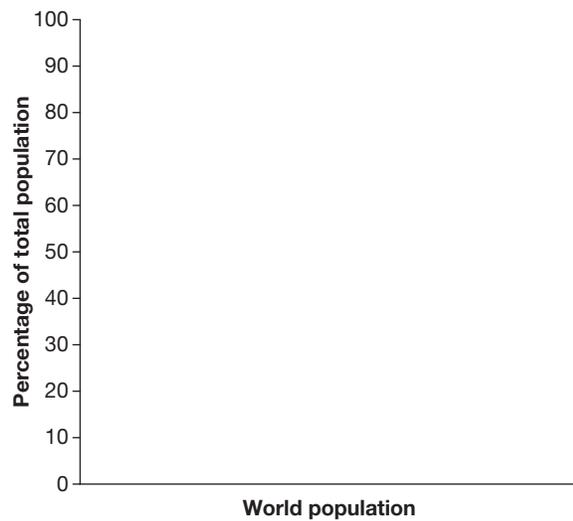
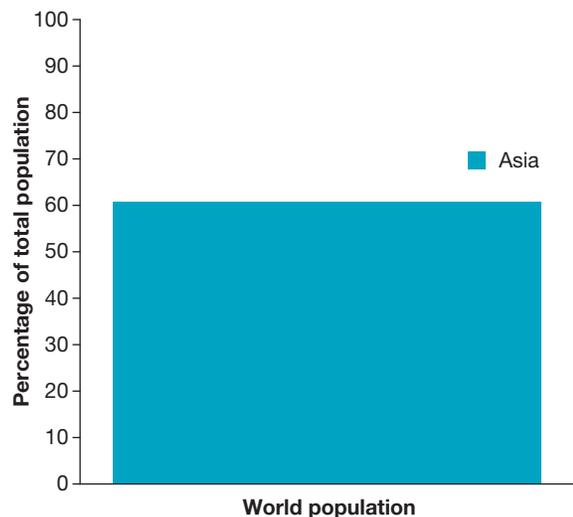


FIGURE 3 Colour the first section of your bar, representing the first (and largest) piece of data, and add a key.



Step 4

Add the next percentage to the percentage for the first piece of data. In this example, add 14.6 per cent to the previous 60.7 per cent and you have a total of 75.3 per cent — this indicates where the next segment of the bar will end. Draw a line where this percentage is represented on your bar (75.3 per cent = 75.3 millimetres if your total bar length is 100 millimetres). Shade the segment in a different colour and add this colour to the key.

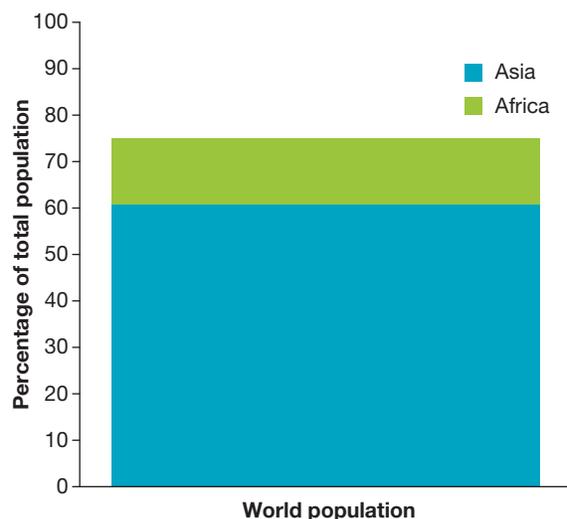
Step 5

Repeat Step 4 until you have completed the graphing, colouring and key. Don't forget to give your compound bar graph a title and state the source of your data under the graph (see **FIGURE 1** for the final graph).

Step 6

Now you can interpret the information displayed in your compound bar graph. Write a description of the information it shows about world population. Begin with a comment on the most obvious feature — the colour that fills the largest section of the bar. In this example, you would state that the greatest percentage of the world's people (60.7 per cent) live in Asia. Now consider each of the other coloured sections of the compound bar and comment on how these colours (and therefore the data) relate to one another. For example, the combined population of North and South America (13.4 per cent) is smaller than that of Africa. The model text accompanying **FIGURE 1** gives a sample description of the data.

FIGURE 4 Colour the second section of your bar. Add the new colour to the key.



8.9.3 Let me do it

8.9 SkillBuilder activity ANALYSING

- Using the data provided in **TABLE 2**, create compound bar graphs to show the proportion of the world's urban population by continent in 1800, and as predicted for 2100. *Hint:* The numbers you need to create the graph are percentages, which you will need to calculate. Use the checklist to ensure you complete all aspects of the task correctly.

TABLE 2 Population by world region

Region	Population in 1800	Population in 2100
Africa	81 273 172	3 813 883 677
Asia	683 181 540	4 611 392 207
Europe	195 246 412	593 526 178
North America	14 838 617	709 316 312
Oceania	1 620 686	72 945 921
South America	9 277 957	379 097 373
Total		

Carefully analyse your two completed compound bar graphs to answer the following questions.

- Which continent had the second-highest proportion of people living in urban areas in 1800?
 - What ranking is that continent expected to have in 2100?
- Which continent is predicted to have the greatest increase in urban population by 2100?

- c. What do you notice about the expected *change* in the urban population of Europe between 1800 and 2100?
- d. Compare the expected *change* in the urban population in Asia and Africa between 1800 and 2100.
- e. Give two other interesting facts your two compound graphs show about the expected *changes* to the world's urban population between 1800 and 2100.

Checklist

I have:

- drawn in pencil
- ruled lines to clearly represent and communicate the data
- coloured according to a key
- included a scale
- provided the source of the data
- included a clear title
- clearly represented and communicated the data in my interpretation.

LESSON 8.10 SkillBuilder: Recognising land features online only

LEARNING INTENTION

By the end of this lesson you should be able to **recognise** and **describe** the major land features on a topographic map.

8.10.1 Tell me

What are land features?

Land features are landforms with distinct shapes, such as hills, valleys and mountains. You recognise these as you look around your natural environment. On topographic maps you recognise land features from the patterns formed by the contour lines.

Why is it useful to recognise land features?

By recognising land features, we understand our natural environment. This is useful for a wide range of activities including:

- planning housing estates, freeway routes and reservoirs
- organising outdoor recreational pursuits such as orienteering, trail-biking and flying
- managing hazards such as flooding.

Recognising land features on a map involves identifying the shapes created by the pattern of contours.

8.10.2 Show me

How to recognise a land feature

By reading the contour lines on a map, an understanding of the shape of the land is obtained. Land features are identified from the contour lines.

You will need:

- a topographic map.

Step 1

Look at the contour lines on **FIGURE 1**. You will see that sometimes the lines are close together and sometimes the lines are further apart. Identify two areas where this is the case.

Step 2

Using your hand, create the shape of a hill. For every 50 metres increase of the hill slope, move your hand higher and at each step visualise that this is the next contour line on a map.

Try this for some other landforms that you are familiar with, such as a valley or a beach cliff.

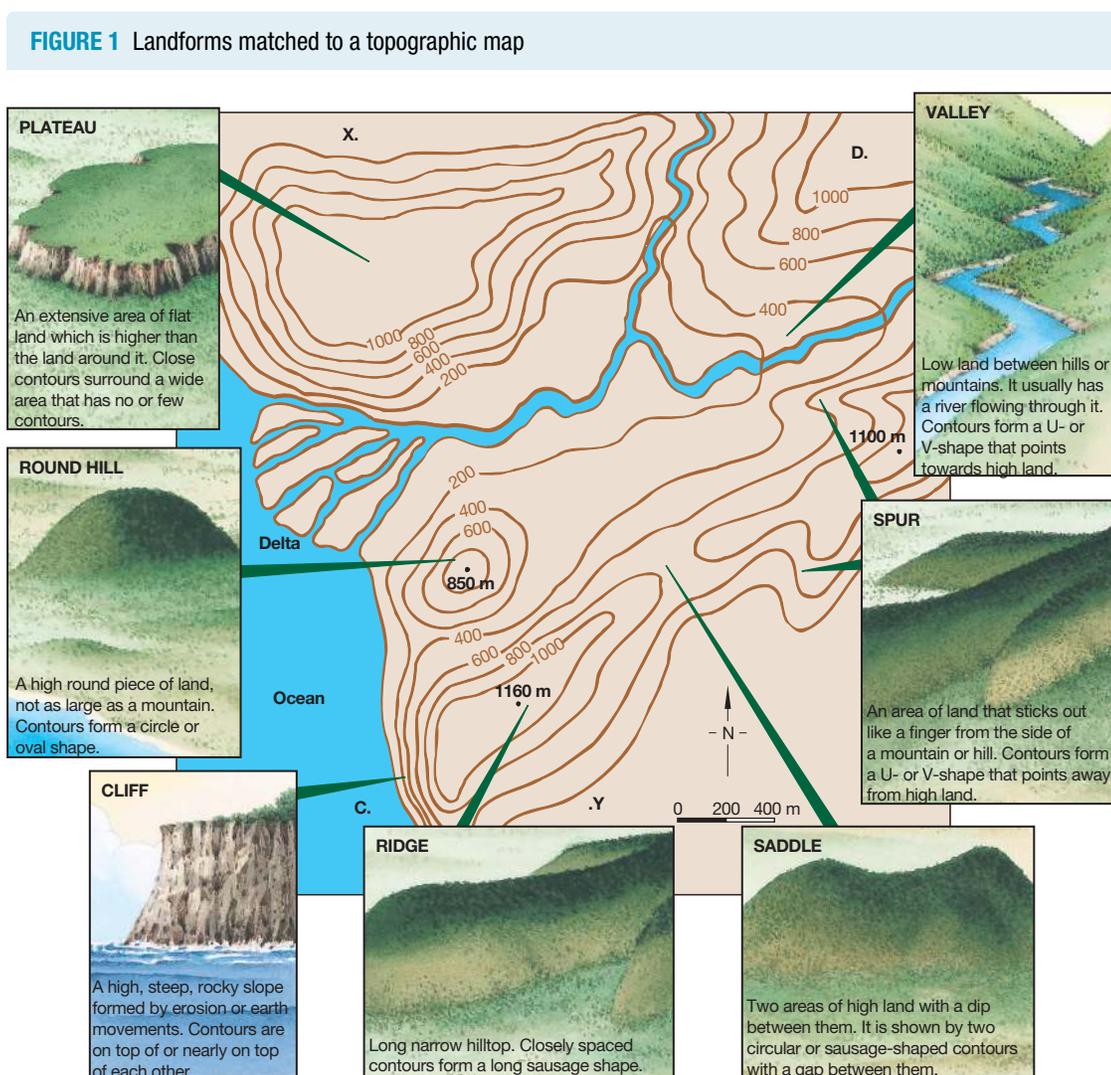
Did you recognise that if the contours are close together then the shape of the land is steep, and if the contours are further apart then the land is flatter?

Step 3

Landforms have distinctive shapes with contours, which a geographer recognises on a topographic map as a particular land feature. Use **FIGURE 1** as a guide to understanding the shapes on maps as land features. Create your own hand models of the shape of each land features.

Model

FIGURE 1 shows a simple topographic map including a spur, cliff, valley and plateau. These land features are identified by the way the contour lines come together to create shapes on the map.



8.10.3 Let me do it

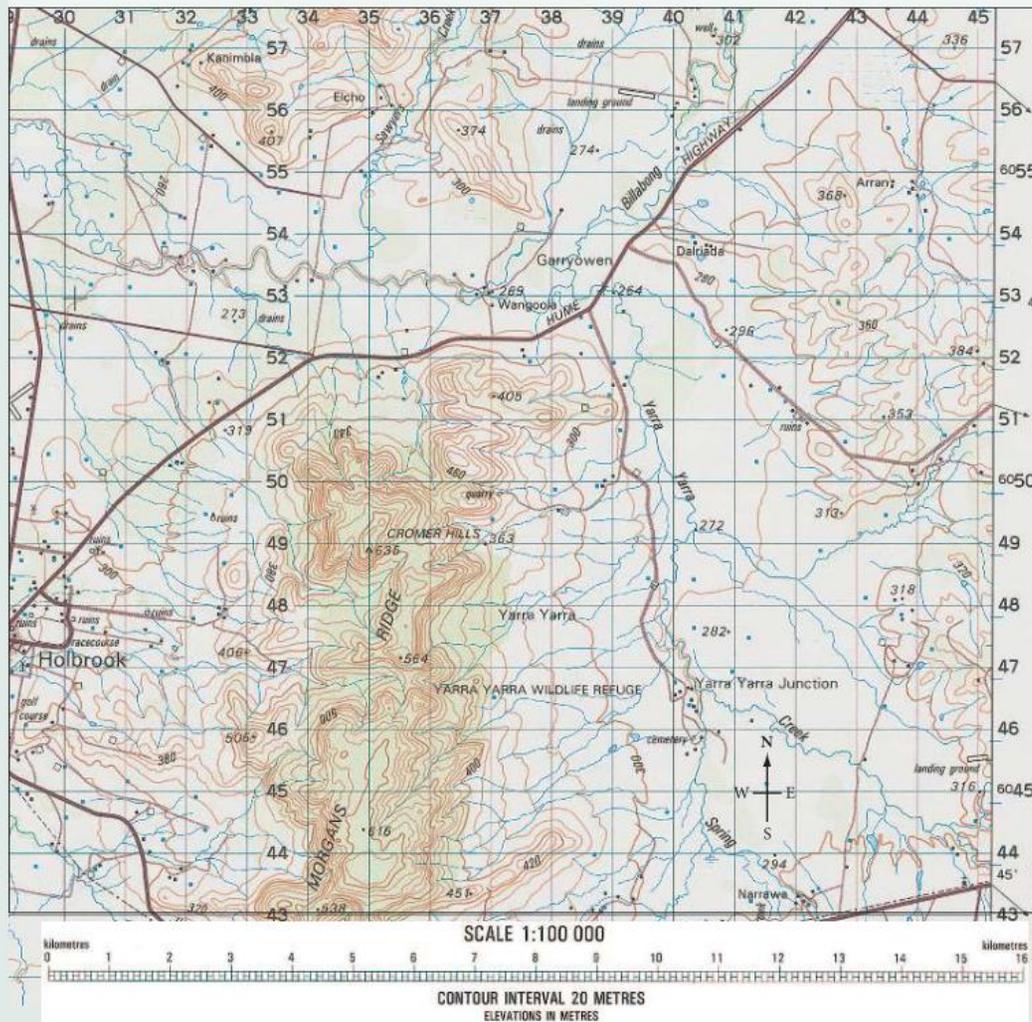
8.10 SkillBuilder activity ANALYSING

1. Use **FIGURE 2**, the map of Yarra Yarra Creek Basin, New South Wales, to identify the following landforms.

- Ridge
- Wide valley
- Very steep slope
- Spot height of 635 metres
- Spur
- Plateau
- Saddle



FIGURE 2 Topographic map of Yarra Yarra Creek Basin



LEGEND		
Built up area; Divided highway; Metropolitan route marker	High voltage transmission line	Mangrove swamp; Area subject to inundation
Recreation reserve with oval; Drive-in theatre; Underpass	Fence; Prominent telephone line	Swamp; Swamp definite boundary
Sealed road two or more lanes; National route marker	Mine; Windmill; Church; Building; Yard	Perennial lake; Watercourse
Sealed road one lane; Embankment	Horizontal control point; Spot elevation	Intermittent lake; Watercourse
Unsealed road two or more lanes	Contour with value; Supplementary contour	Mainly dry lake; Watercourse
Unsealed road one lane; Cutting	Depression contour; Sand; Elevated surface	Tank or small dam; Perennial waterhole
Vehicle track; Road bridge; Gate; Stock grid	Levee, bank or sand ridge; Joint or rock fissure	Saline coastal flat; Intertidal flat
Farm track; Foot bridge	High cliff; Escarpment	Navigation light; Intertidal ledge or reef
Multiple track railway; Station	Vegetation; Dense, medium, scattered	Flot; Exposed wreck; Prominent submerged wreck
Single track railway; Light railway	Vegetation distinctive; Distinctive grass	Prominent submerged reef, rock
Railway tunnel, bridge, underpass	Orchard or vineyard; Line of trees or windbreak	Indefinite watercourse, shoreline; Rock bare or asphalt

Source: Spatial Vision

2. Apply your skills to answer the following questions.
 - a. Which slope of Morgans Ridge would be the most difficult to climb?
 - b. What two natural features can be seen from Morgans Ridge to the east?
 - c. What are the heights of the peaks on Morgans Ridge?
 - d. Can you see the town of Holbrook from Wangoola? Explain your answer.
 - e. What land features form part of Morgans Ridge?

I have:

- identified patterns in contour lines
- recognised the major land features on a topographic map.

LESSON 8.11 SkillBuilder: Using latitude and longitude online only

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the difference between latitude and longitude
- **accurately read** parallels of latitude and meridians of longitude.

8.11.1 Tell me

What are latitude and longitude?

Latitude and longitude are imaginary grid lines encircling the Earth. They can be drawn over a map to help us locate a place.

The lines that run parallel to the equator are called parallels of latitude. Each line is measured in degrees north (N) and south (S) of the equator (0°). The equator divides the Earth into two parts — the northern hemisphere and the southern hemisphere. The latitude at the North Pole is 90°N , and the latitude at the South Pole is 90°S . All places have a latitude reading somewhere between 0° and 90°N , or 0° and 90°S .

Lines of longitude run from north to south from the North Pole to the South Pole. These are called meridians of longitude and are also measured in degrees. The Prime (or Greenwich) Meridian (0°) runs through Greenwich Observatory near London, England. Places are either east (E) or west (W) of this line. All places have a longitude reading somewhere between 0° and 180°E , or 0° and 180°W .

How are latitude and longitude useful?

Latitude and longitude are used to give the precise location of a place in an atlas, on a globe, or on a map showing a large region. Lines of latitude and longitude form a grid pattern on a map and this makes identifying the location of a place easy. A gazetteer index lists latitude and longitude readings of all places featured in an atlas.

FIGURE 1 The parallels of latitude

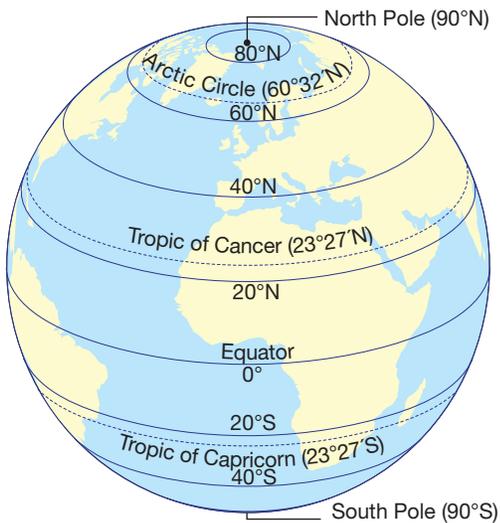
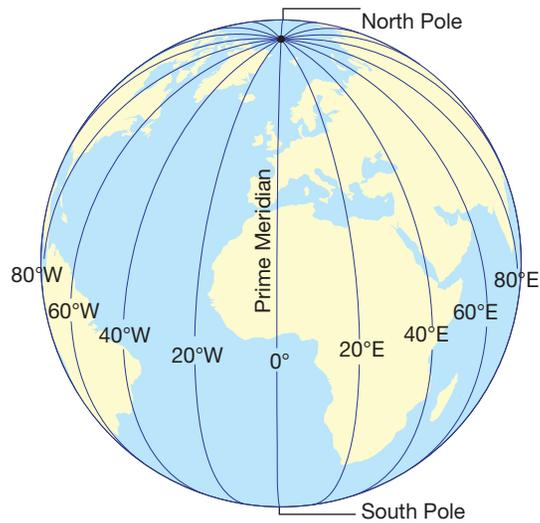


FIGURE 2 The meridians of longitude



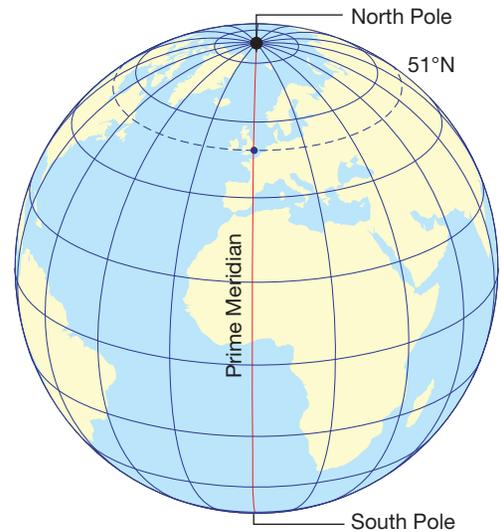
Latitude and longitude are useful for identifying exact locations in a range of situations, including:

- sailing on the open ocean
- flying across vast expanses
- gaining a GPS reading
- viewing Google Earth
- studying maps to plan a touring holiday.

Using latitude and longitude accurately involves:

- identifying the precise location of a place
- accurately reading parallels of latitude
- accurately reading meridians of longitude
- writing the reading correctly.
- identifying the precise location of a place
- accurately reading parallels of latitude
- accurately reading meridians of longitude
- writing the reading correctly.

FIGURE 3 Latitude and longitude lines form a grid pattern



8.11.2 Show me

How to use latitude and longitude

You will need:

- a map with a latitude and longitude grid
- a ruler.

Model

Philadelphia in the United States is located at 40°00'N 75°10'W. Further east, on the coast, is Boston at 42°20'N 71°05'W. Dallas, in the central south of the country, is at 32°47'N 96°48'W. On the west coast, Los Angeles is at 34°00'N 118°15'W and San Francisco is at 37°45'N 122°27'W.

Procedure

Step 1

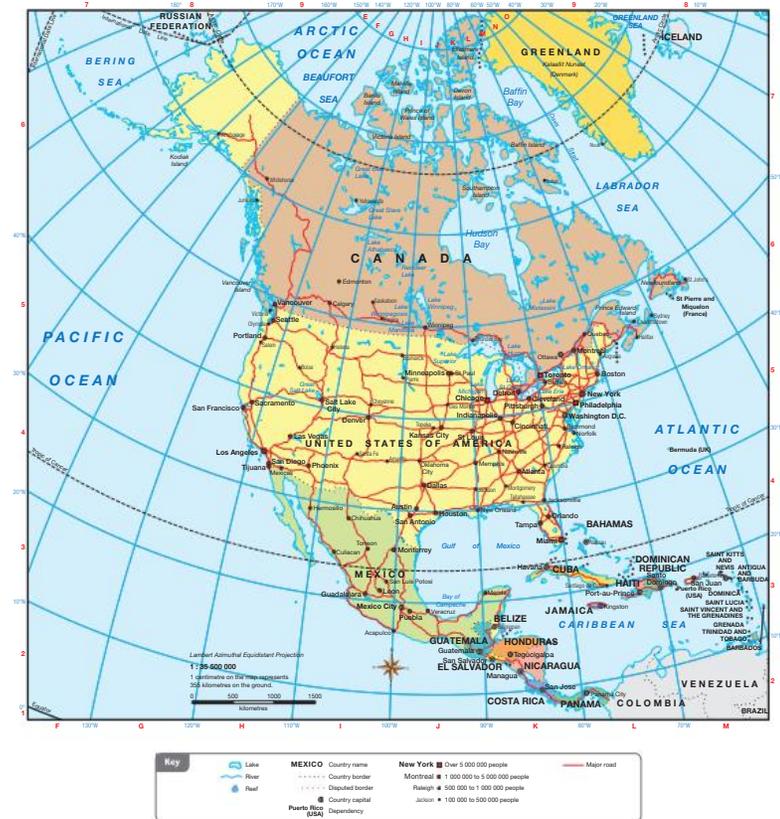
Determine the place for which you want to give a latitude and longitude reading.

Step 2

Begin with the parallels of latitude. Determine the degrees on the line closest to the location. For example, in **FIGURE 4** Philadelphia is at 40°N — it is exactly on the line of latitude and north of the equator. The equator (0°) is shown in the bottom left corner of **FIGURE 4** but due to the Earth's curve, it cannot be seen across the entire map because it dips below the area shown. Not all parallels of latitude are drawn on a map, so you will often have to work out what the closest line of latitude is. For example, in **FIGURE 4**, we can see that Dallas is located at 33°N.

You may have noticed in **FIGURE 4** that an additional parallel of latitude has been drawn and labelled the Tropic of Cancer. This line is at 23.5°N. A similar line is found at 23.5°S and is known as the Tropic of Capricorn. It passes through northern Australia just near Rockhampton. It is between these two lines that the sun moves and determines our seasons.

FIGURE 4 North and Central America



Source: Spatial Vision

Step 3

Each degree on the grid is made up of 60 minutes (see **FIGURE 5**). It is likely that a place is not situated exactly on the degree line, so you will need to determine a minute reading as well. This becomes especially evident in smaller-scaled maps. Calculate the minutes for the place you are identifying. It is often a good idea to place a ruler on the map or use a finger to follow a line so that your eyes don't inadvertently cross to another grid square.

Step 4

Combine the readings to obtain a precise latitude for place. Place A in **FIGURE 5** is at 33°55'S. (The 'S' indicates that this place is south of the equator.)

Step 5

Longitude is determined in a similar manner. Find the north-south line (meridian) closest to the place. Take the line reading and then the degrees reading. For example, in **FIGURE 4** Philadelphia is at 75°W. The 'W' indicates it is west of the Prime Meridian. The Prime Meridian is not shown on **FIGURE 4** but the numbering on the meridians at both the top of the map and the bottom of the map indicate that the Prime Meridian is off the map to the right. On a more detailed map, a minute reading could also be obtained.

Step 6

When combining the grid readings, latitude always comes first. A useful tip is to remember that 'latitude' comes before 'longitude' alphabetically. In **FIGURE 4**, Philadelphia is at 40°N 75°W. In **FIGURE 5**, place B is at 33°15' S 40°50' E. Check that you can find these two places.

Step 7

In the gazetteer index of an atlas, the reading for Philadelphia is listed as 40°00' N 75°10' W. Have a look in an atlas gazetteer index (usually in the back of the atlas) because the places are all identified by latitude and longitude. With a partner, test each other by naming and looking up locations on a map and practising giving their latitude and longitude.

FIGURE 5 Showing minutes of a degree

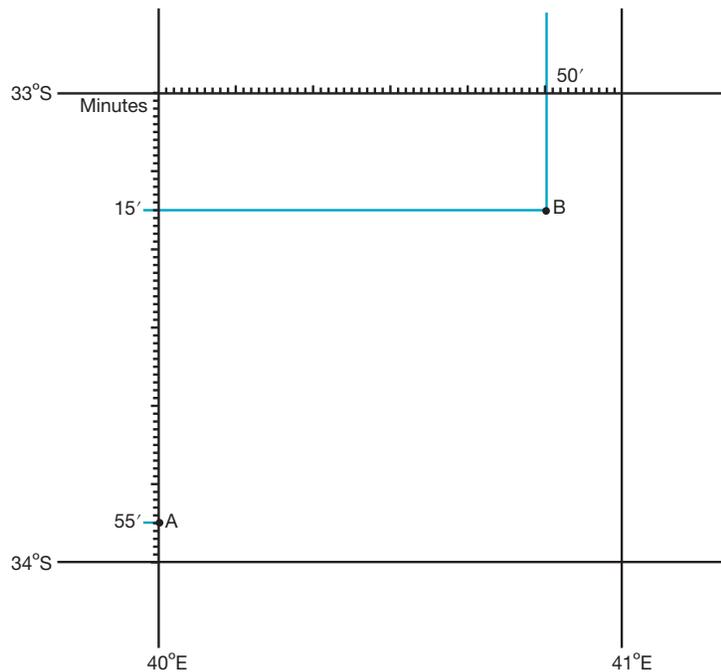


FIGURE 6 A sample from the gazetteer index of an atlas

Van Diemen, Cape	80 C9	11.10 s	130.22 E
Van Diemen Gulf	80 C9		
Vanern, Lake	114 G4		
Vanersborg	114 G4	58.23 N	12.19 E
Vangun, island	89 G3		
Vanimo	88 D3	2.40 s	141.17 E
Vannes	116 C4	47.40 N	2.44 W
Van Rees Range	88 C3		
Vanrhynsdorp	126 B1	31.36 s	18.45 E

8.11.3 Let me do it

8.11 SkillBuilder activity

QUESTIONING AND RESEARCHING

- Using **FIGURE 1(b)** in section 8.14.2, give the latitude and longitude readings at the centre of the listed deserts to complete the table below.

Desert	Latitude and longitude reading
Gibson	
Tanami	
Simpson	
Great Sandy	

2. Apply your skills in using latitude and longitude to answer the following questions.
- Which desert can be found at 22°S 133°E?
 - This South Australian desert can be found at 29°S 141°E. What is its name?
 - Give a latitude and longitude reading such that a person would find themselves at Davenport Range.
 - If you were to travel the full length of the Great Dividing Range, at what latitude and longitude would you begin and finish?
 - Which range extends furthest east — Hammersley, Carnarvon or Robinson? Give the latitude and longitude reading at its most easterly point.
 - Use the following checklist to assess your development of this skill. Can you tick all the items? If not, with a partner, continue your practice of looking up or providing readings for locations in your atlas until you feel confident in your skills.

Checklist

I have:

- identified the precise location of a place
- accurately read parallels of latitude
- accurately read meridians of longitude
- written the readings correctly.

LESSON 8.12 SkillBuilder: Calculating distance using scale online only

LEARNING INTENTION

By the end of this lesson you should be able to **calculate** distance measured with a ruler on a map to an actual distance by using a linear scale.

8.12.1 Tell me

What does it mean to calculate distance using scale?

Calculating distance using scale involves working out the actual distance from one place to another using a map. The scale on a map allows you to convert distance on a map or photograph to distance in the real world — what it represents on Earth's surface. A linear scale is the easiest to use, but sometimes the distance being measured between places is not straight.

Why is calculating distance using scale useful?

Calculating distance by using scale provides a spatial understanding of an area. If you go to an unfamiliar place for a holiday and the tourist information map does not have a scale, it is very difficult for you to know how far it is between places on the map and therefore how long it might take to walk or drive between them. Maps and photographs often show large areas of the Earth on a page. Many people use maps or photographs to gather information and need to understand the distances between places. Examples of people who calculate distance by using scale include:

- architects
- town planners

- engineers
- pilots
- farmers
- tourists.

A good calculation of distance using scale involves accurately converting a ruler-measured distance on a map to an actual distance by using a linear scale.

8.12.2 Show me

How to calculate distance using scale

You will need:

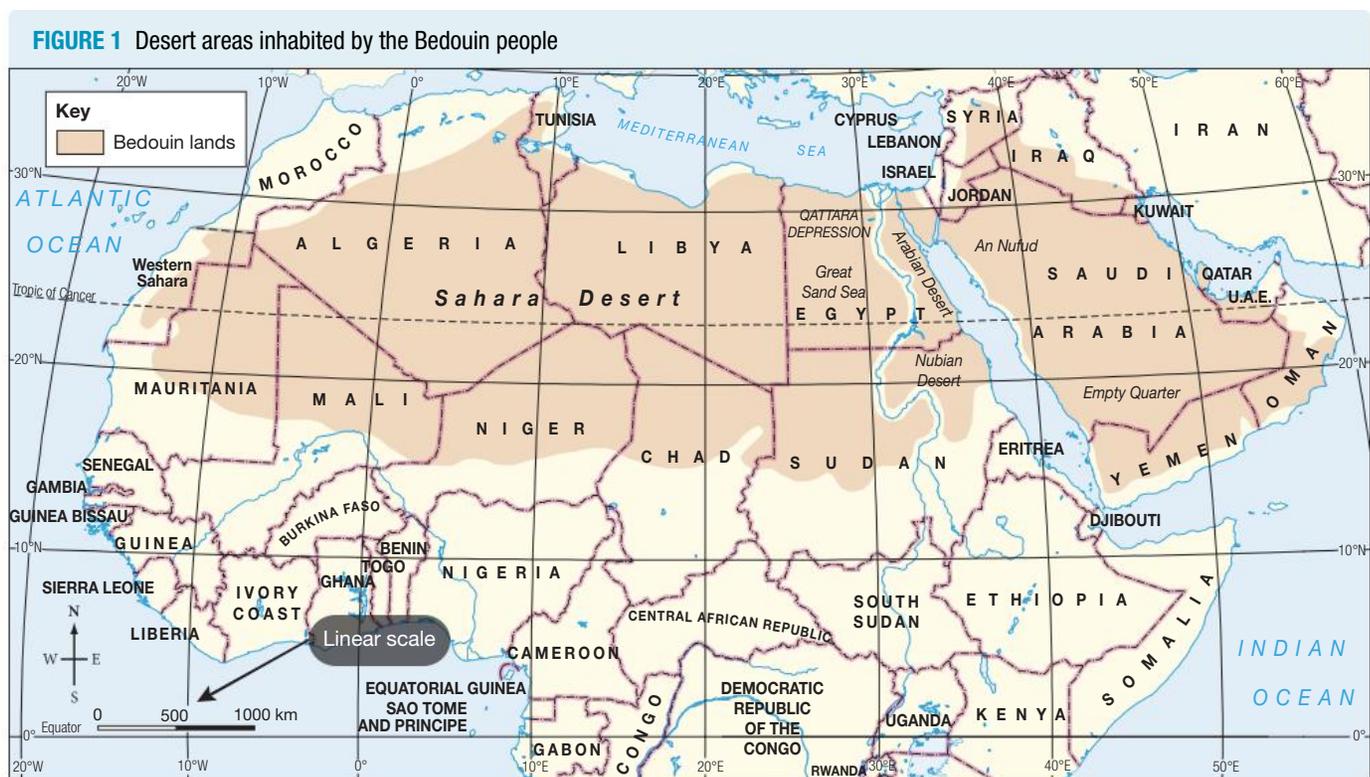
- a map or photograph with a linear scale
- a piece of paper with a straight side for marking places
- a light grey pencil
- a piece of string
- a pencil.

Model

The linear scale of the **FIGURE 1** map is shown in the lower left corner. The shaded Beduin lands are seen in the key/legend. The Sahara Desert, where the Beduin people live, is approximately 5250 km from west to east and, on average, 1900 km from north to south.

Procedure

To calculate the distance between places or around places, it is easiest if you have a map or photograph that has a linear scale as shown in **FIGURE 1**.



Source: MAPgraphics Pty Ltd, Brisbane

Step 1

Determine the two places between which you want to know the distance. If it is a straight-line distance between the two places — the distance ‘as the crow flies’ — then your paper edge must be long enough to go between these points. If not, and the distance is winding, then you will need to learn to bend your paper (jump to **step 4**) or use a piece of string (jump to **step 8**).

Step 2

Place the straight edge of the piece of paper between the two places. Mark the two extremities of the distance on the edge. Label the place names at each end if working from a map.

Step 3

Place this marked edge of paper onto the linear scale drawn on the map. One end of the markings must be at 0. Read off the distance on the scale. If the distance is longer than the scale bar on the map, mark your paper edge where the scale bar ends and move this new mark to 0, repeating as often as required. If you have to do this you will need to add the distances together to find the total distance between the named places. Don't forget to add the unit of measurement (for example, metres or kilometres).

FIGURE 2 Measuring straight distances with a scale

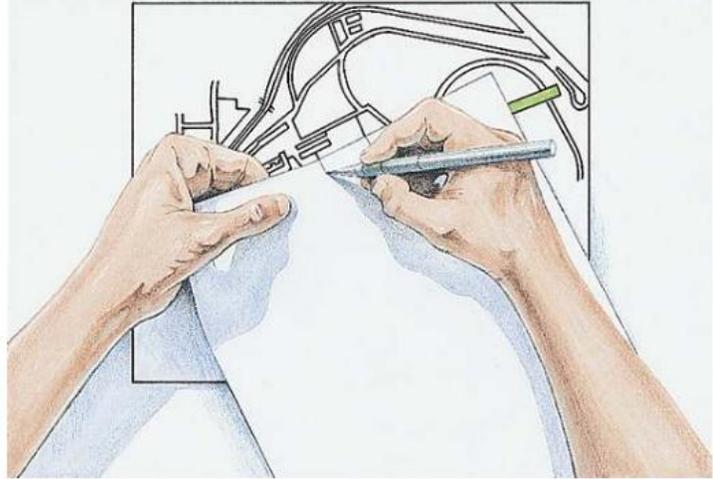
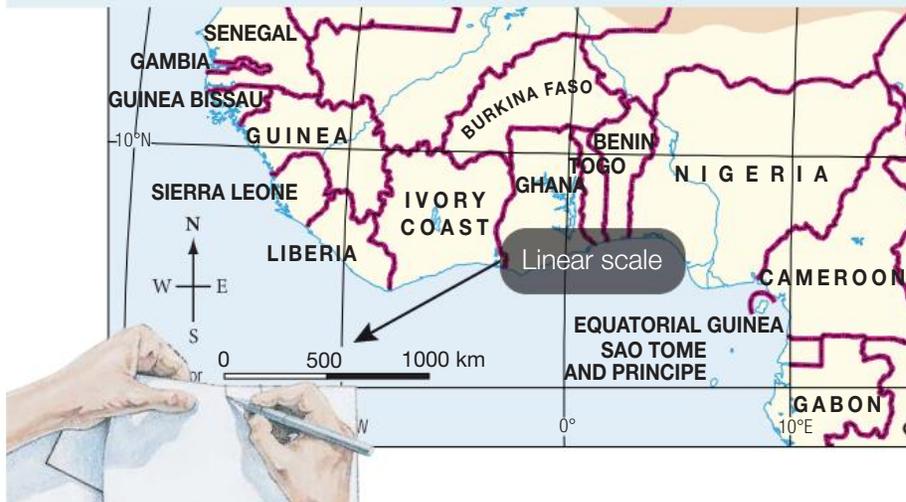


FIGURE 3 Converting the paper edge markings to a ‘real’ distance



Step 4

If the distance is winding rather than straight — perhaps you are following a road through hills, or a river winding its way downstream, or a hiking track across a ridge — begin by placing the edge of the paper against the starting point, marking the edge with the place name.

Step 5

Move the paper carefully so the edge follows the curve on the map. Use your pencil to apply light pressure while you adjust the paper edge to the curve.

Step 6

Mark and label the end point on your paper.

Step 7

Place the paper along the linear scale and read off the distance between your two places as you did in **step 3**. Don't forget to add the unit of measurement (for example, metres or kilometres).

Step 8

The technique using a piece of string is risky — if you let go of the piece of string, you'll have to start again! Place one end of the string at your starting point and bend the string around the winding distance.

Mark the total distance carefully and place the string against the linear scale to calculate the total distance between the two places. One end of the string must be at 0. Read off the distance on the scale. If the distance is longer than the scale bar on the map, mark the string or hold it carefully where the scale bar ends and move this new mark to 0, repeating as often as required. If you have to do this, you will need to add the distances together to find the total distance between the named places. Don't forget to add the unit of measurement (for example, metres or kilometres).

FIGURE 4 Measuring curved distances with a scale using a paper edge

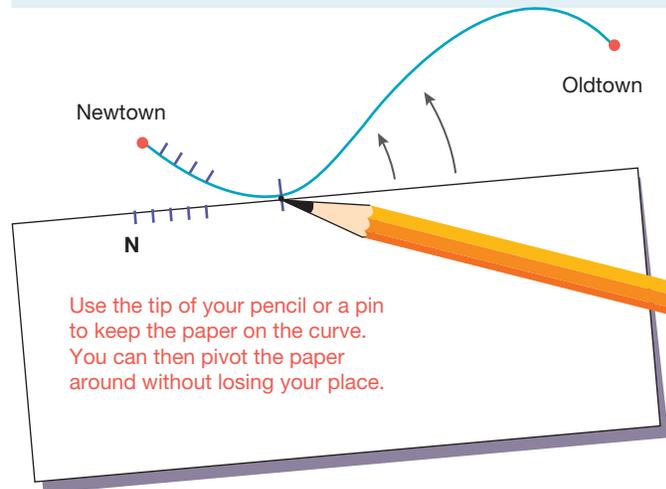
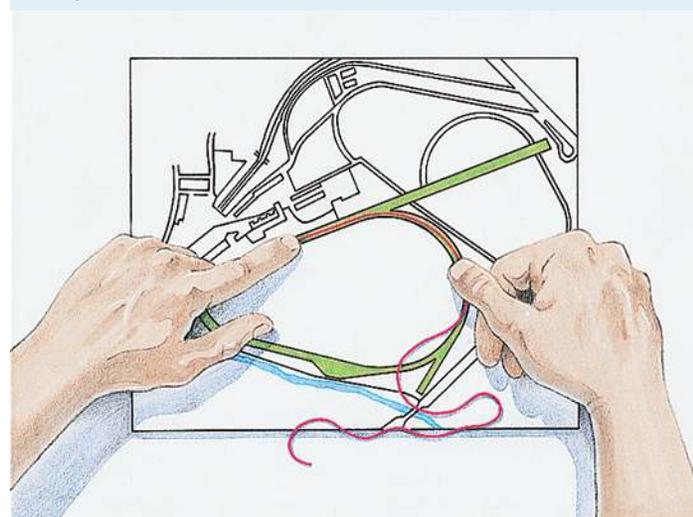


FIGURE 5 Measuring curved distances with a scale using a piece of string



8.12.3 Let me do it

Complete the following activity to practise this skill.

8.12 SkillBuilder activity ANALYSING

Using **FIGURE 1(b)** in section 8.14.2, complete the following. Tick off the checklist when you feel confident in your development of this skill.

- How far is it from the west to the east of the Great Victoria Desert?
- How far is it between the Central Desert and the Simpson Desert?

- c. Calculate the distance around the Tanami Desert.
- d. What is the distance around the area designated as 'arid zone'?
- e. What length of 'arid zone' boundary is also on the coast of Australia?

Checklist

I have:

- accurately converted a distance measured with a ruler on a map to an actual distance by using a linear scale.

LESSON 8.13 SkillBuilder: Interpreting an aerial photo online only

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why aerial photographs are useful
- **interpret** shapes, sizes, tones, patterns and textures on a vertical aerial photograph
- **write** a detailed description of the vertical aerial photograph.

8.13.1 Tell me

What are aerial photos?

Aerial photographs are those that are taken from above the Earth from an aircraft. Aerial photos, either oblique or vertical, record how a place looks at a particular moment in time. Greater detail of a place can be captured than in a photo taken from ground level. Some aerial photos are also satellite compilations; that is, created by a number of images transmitted from the satellite.

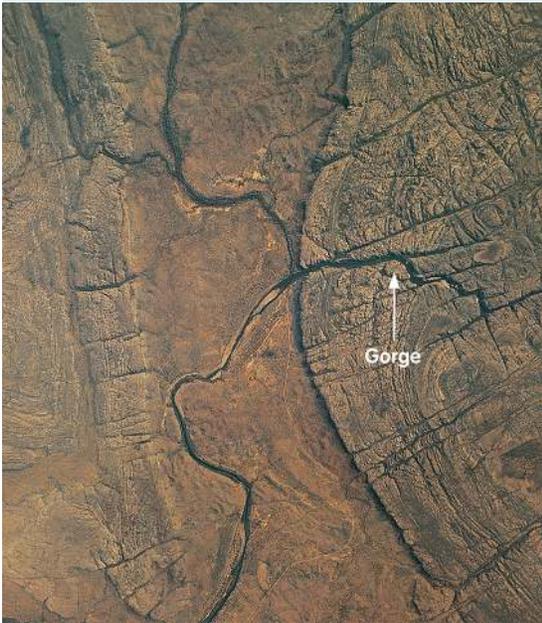
Vertical aerial photos are taken from directly above; that is, looking straight down on objects. Specially equipped aircraft take these photos. These photos are often referred to as a 'bird's eye' view. This is the view from which maps are drawn. When you look at one of these photos, there is a similarity to a plan drawing. For example, Katherine Gorge in **FIGURE 2** is so deep and narrow that it appears as a thin line 'snaking' through the rock formation.

Oblique aerial photos are those taken at an angle from an aircraft. These photos show the height and shape of objects better than vertical aerial photos, but some of the objects in the background can be hidden. Objects in the foreground appear larger than those in the background. For example, in the oblique aerial photograph in **FIGURE 3** showing rock formations in Purnululu National Park in the Kimberley region of Western Australia, the sandstone domes appear larger in the foreground than in the background.

FIGURE 1 Cartographers use different types of photographs

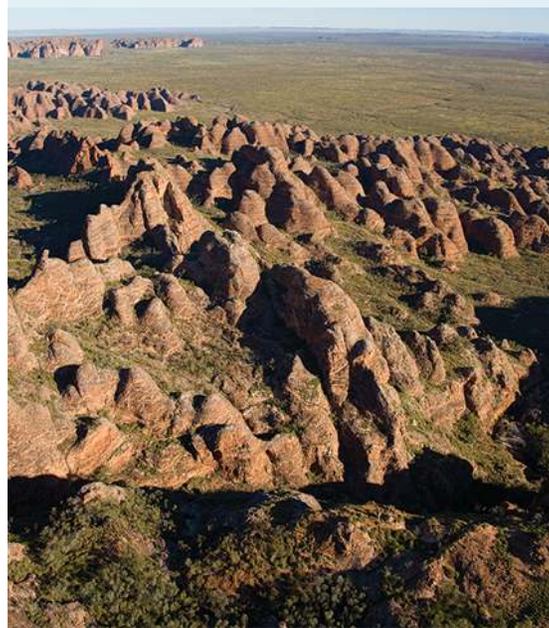


FIGURE 2 Vertical aerial photograph of Katherine Gorge



Source: © MAPgraphics Pty Ltd, Brisbane

FIGURE 3 Oblique aerial photo of rock formations in Purnululu National Park



Why are aerial photos useful?

Aerial photos can reveal details that are not recorded on maps. They make it easier to see landforms with distinct shapes, different landscapes, land uses, specific places and spatial patterns of the environment. Aerial photos from different time periods can show how a place has changed over time (see **FIGURE 4**).

FIGURE 4 Satellite images of Banda Aceh, Indonesia (a) before, (b) two days after and (c) four years after the tsunami on 28 December 2004





Interpretation of aerial photos provides a rich source of data for understanding the environment. We can obtain much information about a place by carefully analysing and interpreting an aerial photograph. We also need to be able to describe aerial photo to others. Some groups that use aerial photos are:

- urban developers
- firefighters
- search and rescue organisations
- transport authorities
- agronomists (people who manage land and crops).

Interpreting an aerial photograph involves:

- identifying key features by recognising elements such as shapes, colours, patterns and textures
- describing the main aspects in detail.

8.13.2 Show me

How to interpret a vertical aerial photo

You will need:

- a vertical aerial photo.

Model

The small Australian country town shown in **FIGURE 5** is predominantly a rectangular shape with a grid road system. A major road becomes a divided road as it passes through the town centre. Beside this road is the main shopping strip. The houses are on quite large blocks of land and most gardens have trees. Backyard swimming pools are scarce. The local bowling club can be found in the south-east of town. There appears to be some expansion of the town toward the west. This aerial photograph was taken either in summer when the land is dry or the town is in a low rainfall environment.

Procedure

To identify features on an aerial photograph, such as that in **FIGURE 5**, you need to apply the elements of interpreting an aerial photograph — shapes, size, tone, patterns and texture.

Step 1

First, let's consider 'shape' and 'size'. Objects from a vertical viewpoint have obvious shapes. Buildings appear as blocks (you are looking at the roof only). Small blocks are houses; larger blocks are factories if a number are grouped together; single, larger blocks are generally public buildings such as schools, halls and shopping centres. Oval or round shapes are sporting grounds/tracks. Can you imagine a golf course from above? Its size is large; its shape indicates green grass and rows of trees dividing the fairways. Look around the aerial photograph in **FIGURE 5** and identify the trees in the median strip of the major road.

Step 2

'Texture' and 'tone' are gained from the objects themselves in the course of the photography. Texture indicates whether the object has a degree of smoothness or whether it is rough. A mown oval will appear as 'smooth and green'; a forest will appear as 'lumpy and various greens' according to the size and species of trees in the forest; farmland sown to different crops and with some land ploughed will appear as a mosaic of colours.

Tone is the reflection of light from objects to the camera.

- Water glistens when clear, but appears brown when in flood.
- The deeper the water, the darker the colour.
- Sealed highways reflect light in comparison to the dirt of rural tracks. **FIGURE 5** shows a range of differently sized and surfaced roads.
- Sandy beaches glow a cream colour compared to the dark colour of bare soil.

Step 3

'Pattern' is what a geographer delights in observing, as they try to understand the world around them. This involves discovering key patterns in the aerial photograph. Towns generally have a series of roads in a grid pattern. Rivers, as a natural feature, wind their way through an environment. Irrigation channels and railway lines built by humans appear as straight lines. **FIGURE 5** shows how readily the boundary can be identified in this rural environment.

FIGURE 5 Vertical aerial photograph



Source: © Aerial Impressions

8.13.3 Let me do it

8.13 SkillBuilder activity

COMMUNICATING AND REFLECTING

1. Study the vertical aerial photo of Villarrica volcano, Chile (**FIGURE 6**). Use the steps in section 12.9.2 'Show me' to identify key shapes, sizes, patterns and textures. Expand the size of this aerial photo and, using the Paint program (or similar software), label the following features:
 - the central vent
 - snow covered area
 - mud and/or lava flows
 - lakes
 - barren land
 - forested areas
 - a coastal settlement.
2. Apply your skills in interpreting aerial photos to answer the following questions about **FIGURE 6**.
 - a. Why do you think the mountain peak is covered in snow?
 - b. What is the source of the water in the lakes?
 - c. Suggest why some of the land is bare.
 - d. How do you know that small areas of land near the base of the volcano are used for agriculture?
 - e. By its shape, what type of volcano is Mount Villarrica?

FIGURE 6 Villarrica volcano, Chile



Source: © NASA Earth Observatory image by Jesse Allen and Robert Simmon, using EO-1 ALI data provided courtesy of the NASA EO-1 team.

3. Write a detailed description of the aerial photograph, including your interpretation of the shapes, sizes, tones, patterns and textures in the image. Use the checklist to ensure you have covered all aspects of this task.

Checklist

I have:

- interpreted shapes, sizes, tones, patterns and textures on a vertical aerial photograph
- written a detailed description of the vertical aerial photograph.

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** what a thematic map is, and why they are useful
- **interpret** shapes, sizes, tones, patterns and textures on a vertical aerial photograph write a detailed description of the vertical aerial photograph.

8.14.1 Tell me

What is a thematic map?

A thematic map is a map drawn to show one aspect; that is, one theme. For example, a map may show the location of vegetation types, hazards or weather. Parts of the theme are given different colours or, if only one idea is conveyed, symbols may show location.

Why are thematic maps useful?

Thematic maps are used to identify and represent a single feature. Because no additional clutter is presented on the map, the reader can focus on one feature only.

Thematic maps are useful for:

- focusing the viewer's attention on a single feature
- highlighting the significance of a single feature
- comparing different areas of a map in terms of the existence of a feature.

A good description of a thematic map:

- utilises the title to identify the theme
- applies the key/legend in order for readers to understand the colouring and/or symbols
- identifies and communicates the key theme and features.

8.14.2 Show me

How to understand a thematic map

You will need:

- a thematic map
- an atlas.

Model

FIGURE 1(a) shows four major landform regions. It is a simplified version of the natural features map shown in **FIGURE 1(b)**. Much of Australia is dominated by the Great Western Plateau, particularly in the west of the country. Following the coastline are the coastal lowlands, except around the Great Australian Bight and near the Victorian/South Australian border. The eastern highlands run parallel to the east coast from the northern tip of Australia to the south. The central lowlands run from the Gulf of Carpentaria to the Victorian/South Australian border.

Procedure

To understand a thematic map, you must be prepared to follow a planned approach to its study.

Step 1

Read the title of the thematic map. What part of the world does the map show? When was the data gathered? What is the theme? In **FIGURE 1(a)**, the theme is 'major landforms in Australia'.

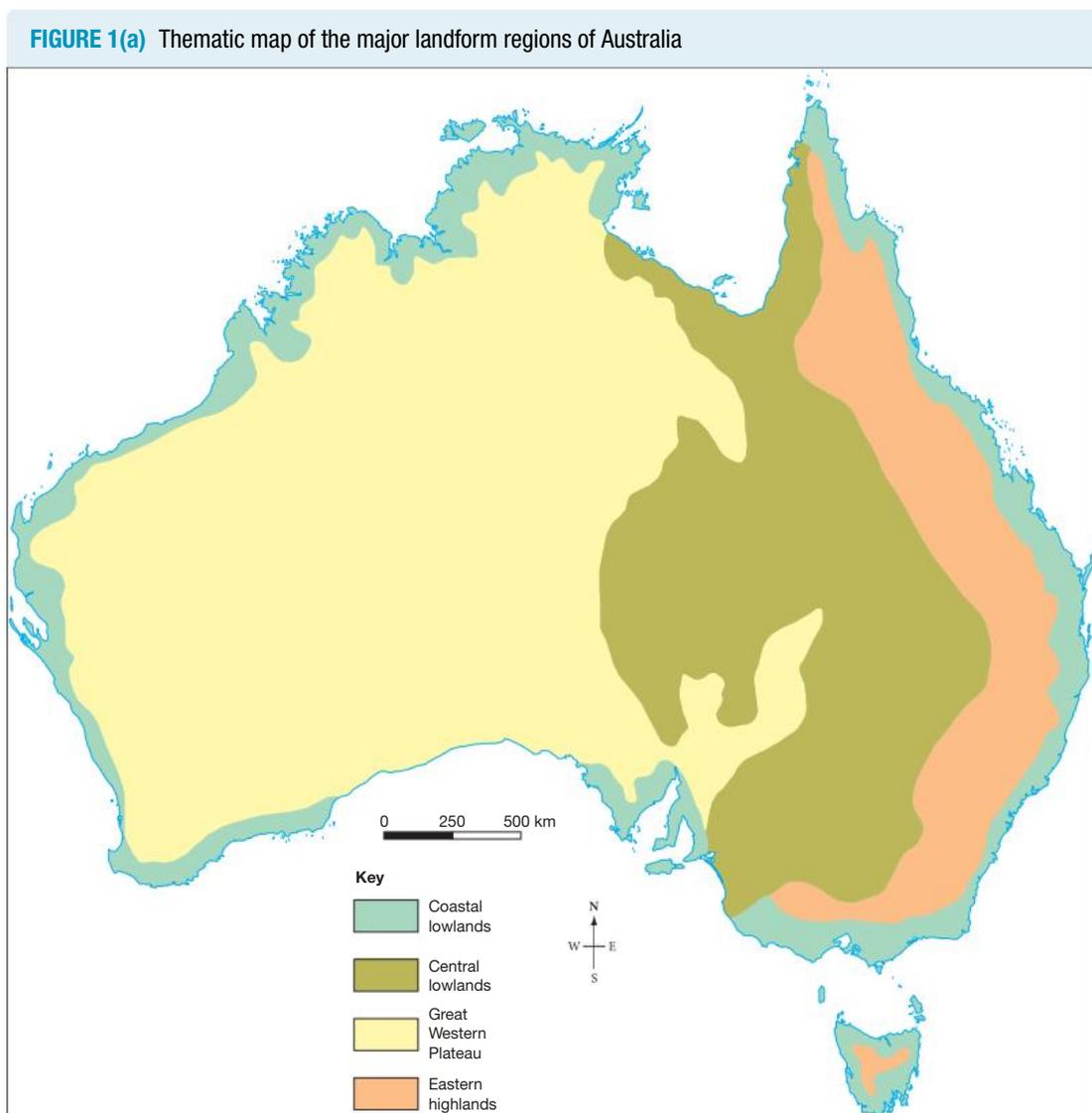
Step 2

Check that the map was put together by a reliable authority. Who is the source of the map? Sometimes textbooks don't state the source, but you can usually find this information by looking at the list of acknowledgements in the book.

Step 3

Read the key/legend to understand the colours and/or symbols that are used. In **FIGURE 1(a)**, four different colours are used to represent each of the four major landforms.

To interpret the colours you need to comment on where the various colours or symbols occur. Can you discuss the map by continent, or by region? An atlas may be useful to help you identify regions or places. In **FIGURE 1(a)**, the eastern highlands stretch from the north of Australia to the south, parallel to the coastline.



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

FIGURE 1(b) Topographic map of the natural features of Australia



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

Step 4

You also need to discuss the colours or symbols that appear only in small areas of the map. In **FIGURE 1(a)**, the central lowlands reach to the coast near the Victorian/South Australian border and the Great Western Plateau meets the coast in the Great Australian Bight.

8.14.3 Let me do it



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane. Data from United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, CD-ROM Edition.

8.14 SkillBuilder activity ANALYSING

- Using **FIGURE 2**, describe the locations of the world's 20 largest cities. Use the checklist to ensure you cover all aspects of the task.
- Apply your skills by answering the following questions.
 - What is the title of the map in **FIGURE 2**?
 - What theme is being shown in **FIGURE 2**?
 - On which continent are most of the 20 largest cities located?
 - Which continents contain none of the 20 largest cities?
 - How many people live in the three largest cities in South America?

Checklist

I have:

- utilised the map title to identify the theme
- applied the key/legend in order to understand the colouring and/or symbols
- identified and communicated the key theme and features.

LESSON 8.15 SkillBuilder: Drawing a line graph using Excel online only

8.15.1 Tell me

What is a line graph?

A line graph is a clear method of displaying information so it can be easily understood. It is best used to show changes in data over time.

A line graph can be drawn by hand. In this SkillBuilder, you will develop your skills in constructing a line graph using Excel, which is a spreadsheet program. Using a digital means of drawing a line graph enables you to show multiple data sets clearly.

Why are line graphs useful?

A line graph is useful to help analyse data quickly and also to compare data. **FIGURE 1** shows five data sets and you can quickly see which two countries are the top producers of palm oil.

A good line graph has:

- time shown on the horizontal axis
- axes labelled
- a key, if necessary
- a clear title
- shown the source of the data.

8.15.2 Show me

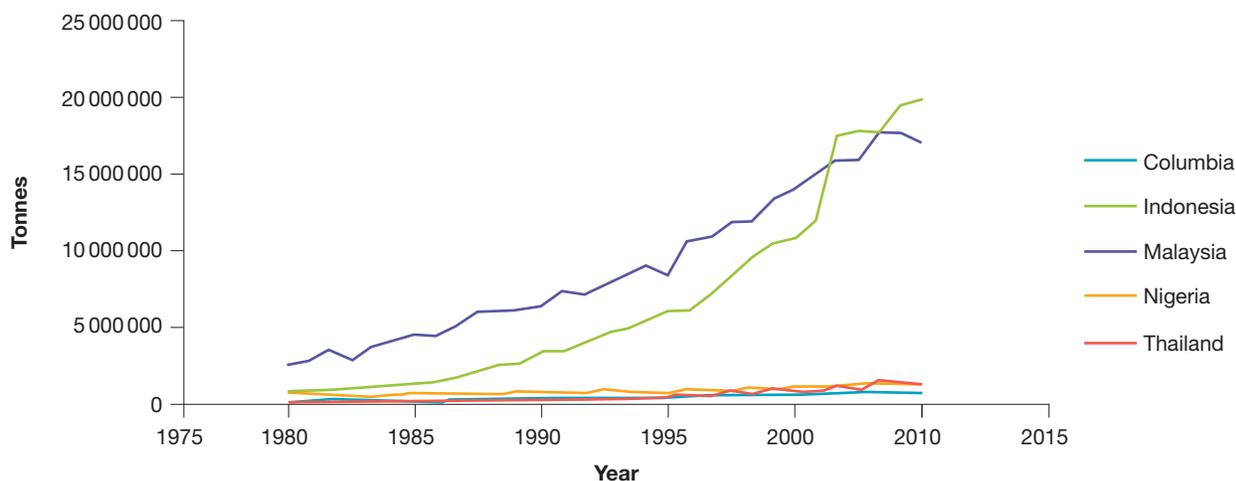
How to draw a line graph using Excel

You will need:

- Excel software
- a set of data.

Model

FIGURE 1 Production of palm oil for the top five producers (1980–2010)



Source: Food and Agriculture Organization of the United Nations 2012 FAOSTAT, <http://faostat3.fao.org/home/index.html>

Procedure

Step 1

Enter the data into the Excel worksheet. Put time (hours, days, months or years) in column A and the other variable in column B. Do not leave blank rows or columns. Make sure each column has a heading to describe the data.

If there is more than one set of data, list the second data set in column C, and so on.

FIGURE 2 Data for the top five producers of palm oil (1980–2010) is entered in separate columns of an Excel worksheet.

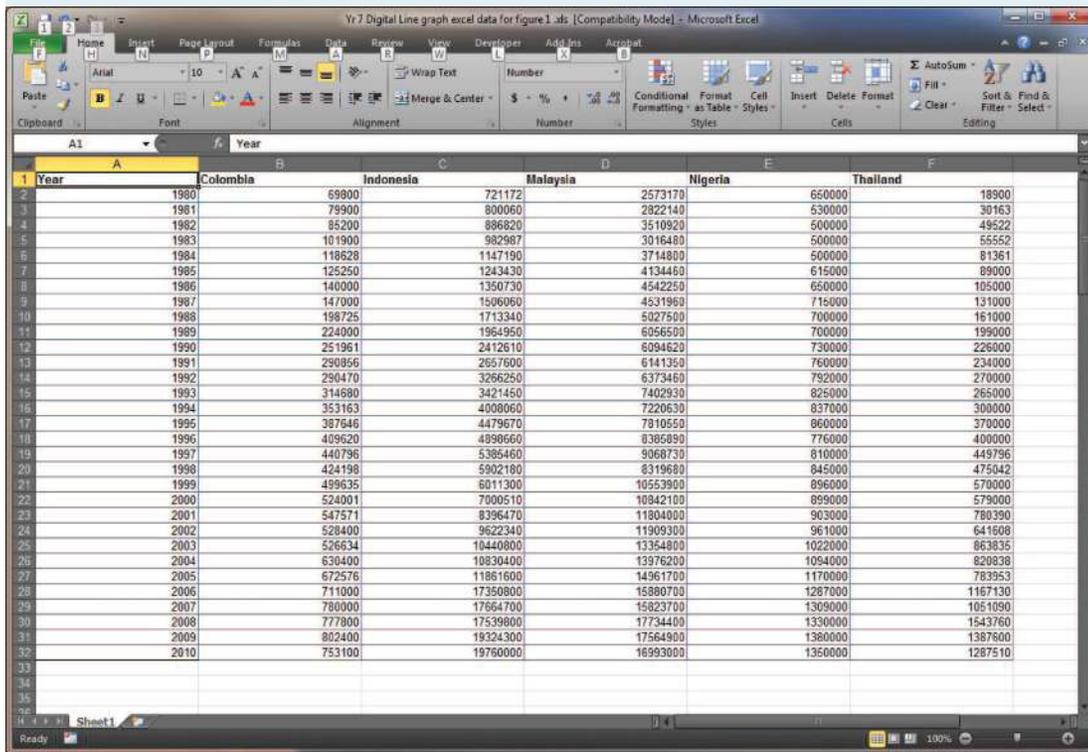
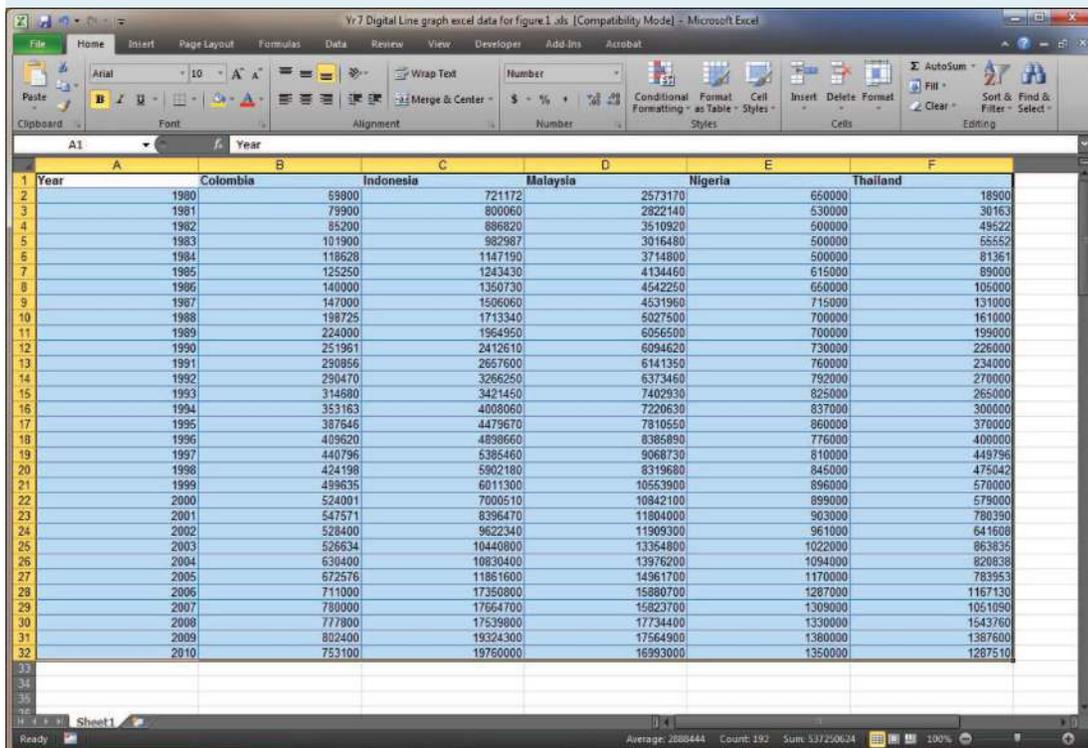


FIGURE 3 The required data (all values in the example shown here) is selected.



Step 2

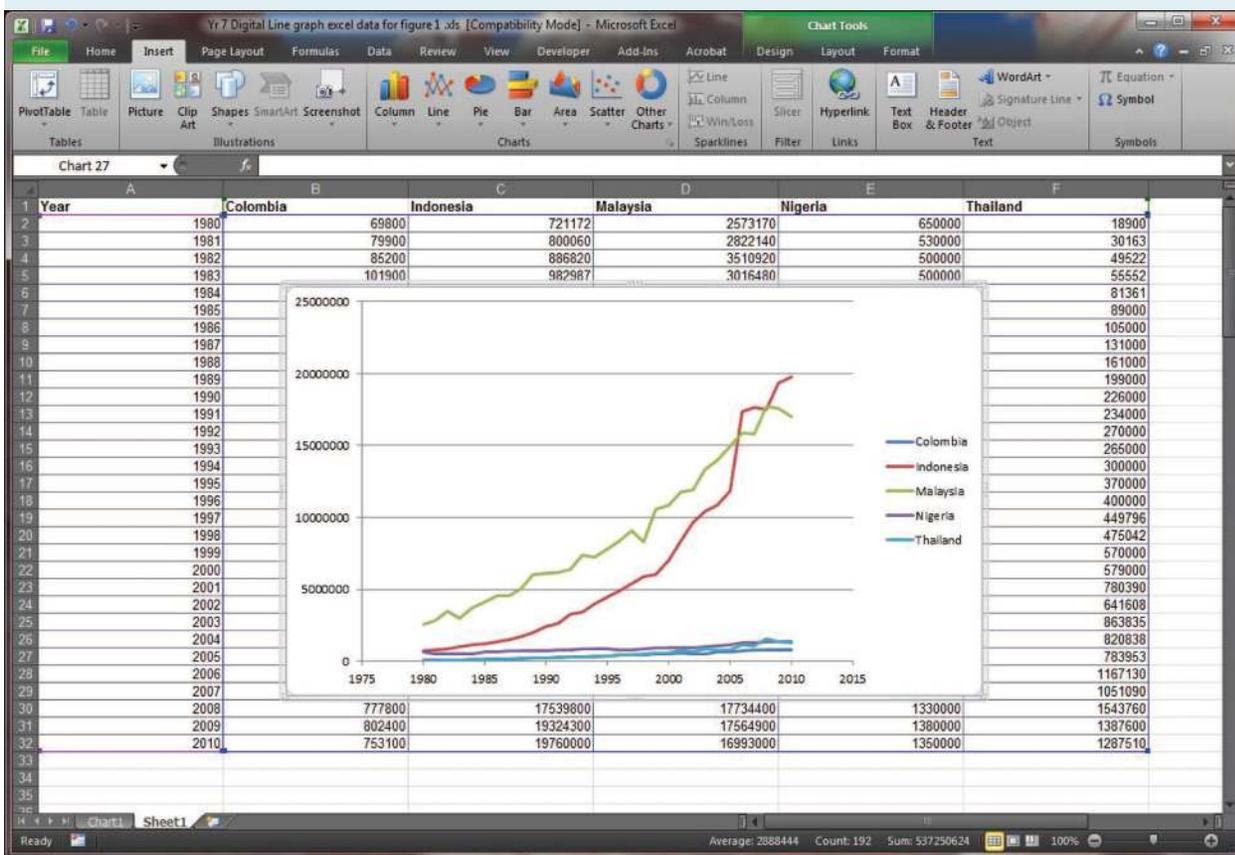
Drag- select with the mouse button to highlight the cells containing the data to be included in your line graph.

Note: Make sure you select any column and row details (headings) that you want included in the graph.

Step 3

Click on the 'Insert' tab, then click on a category in the 'Charts' section to open a drop-down list of available graph types. Hover your mouse pointer over a graph type to bring up a description of the graph. Click on the 'Scattergraph' category and select the 'Scatter with Straight Lines' option. A line graph is created and placed on your worksheet. You can change the graph style using the tabs within the 'Chart Tools' section.

FIGURE 4 Select the 'Scatter with Straight Lines' option to produce a graph with a line for each of the variables in your data set.



Step 4

Label the axes. Click on the 'Layout' tab within the 'Chart Tools' section. Select 'Axis Titles' and enter the axis names for the horizontal and vertical axes.

Step 5

To add a title to the line graph, click on the 'Layout' tab within the 'Chart Tools' section. Select 'Chart Title' and choose the option 'Above Chart' for placement of your title. Type an appropriate title for your graph in the text box that appears.

Step 6

Select the 'Design' tab within the 'Chart Tools' section. Click on the 'Move Chart' button on the right. This places your chart on a new page within your spreadsheet.

FIGURE 5 Label the axes on your graph.

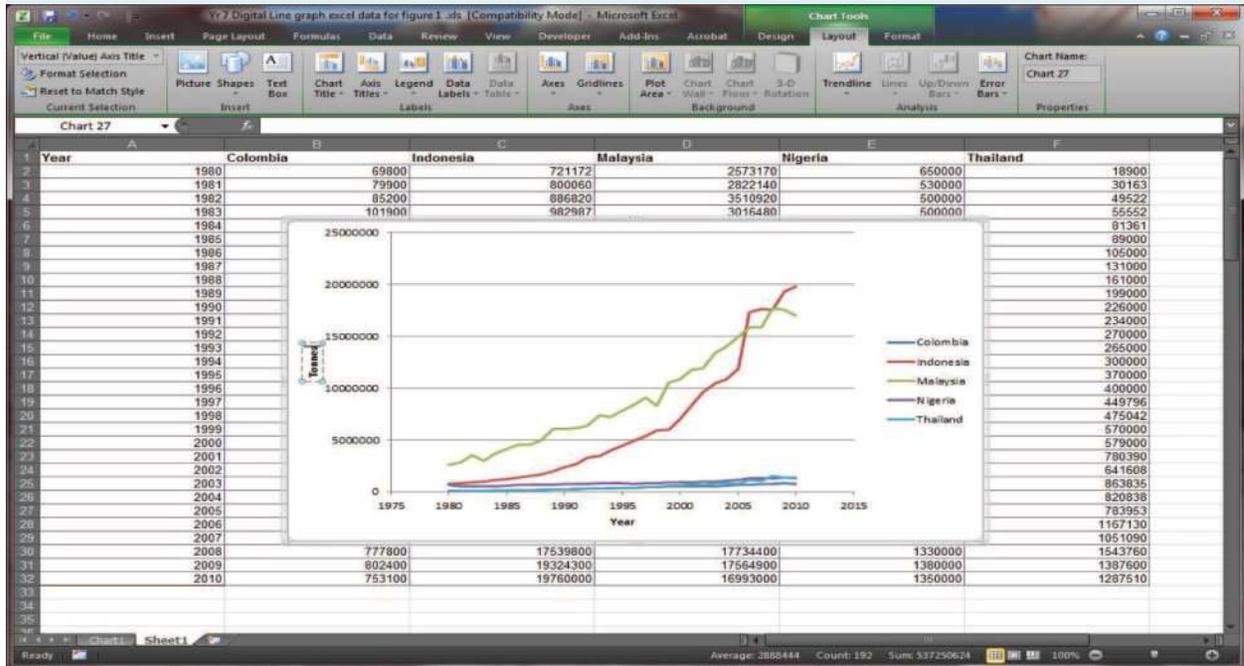
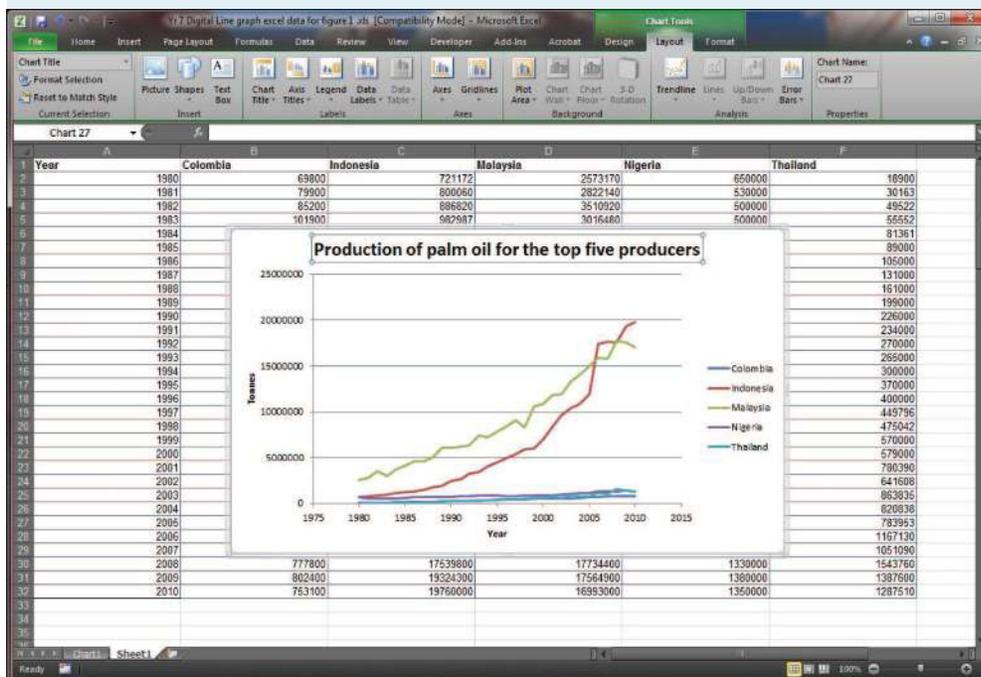


FIGURE 6 Add a title to your graph.



Step 7

Add the source of the data. One way to add this kind of extra information is to use a text box.

Select the chart. Click on the 'Insert' tab and select 'Text Box'. Drag your cursor to draw a text box of an appropriate size, and enter the details of the source of your data. Format your text to a suitable size and style, and move the text box to an area where it does not interfere with the reading of the graph.

FIGURE 7 Move your graph onto its own page within the spreadsheet.

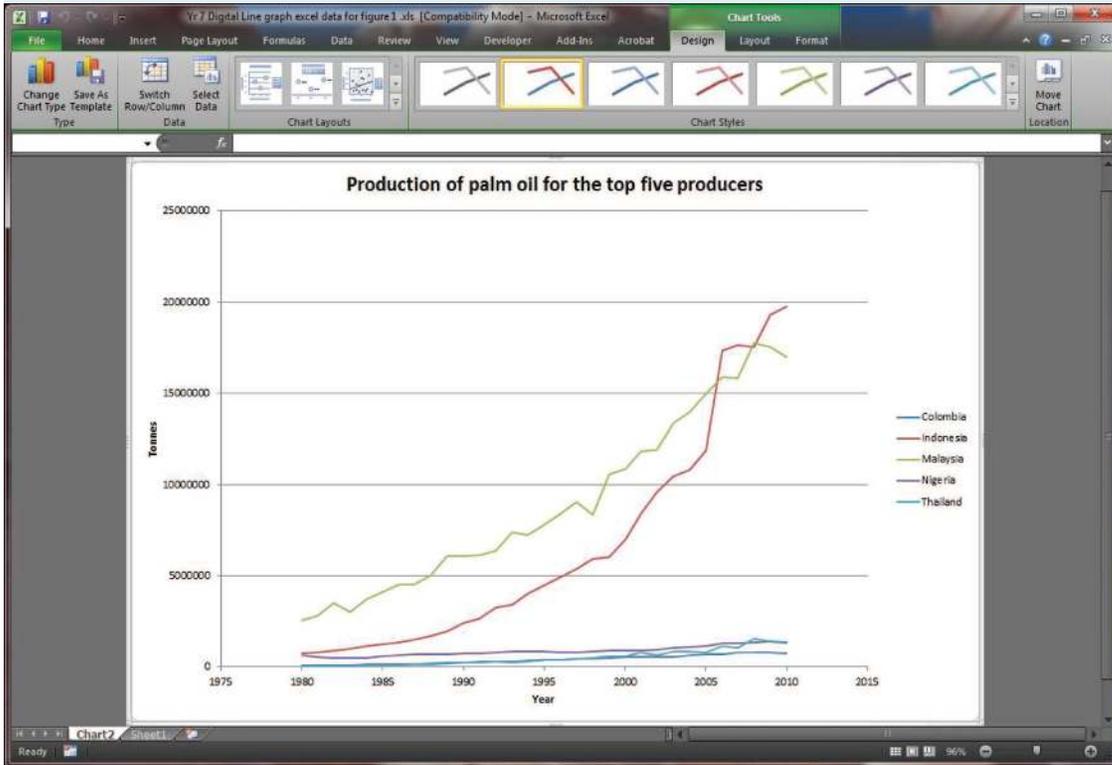
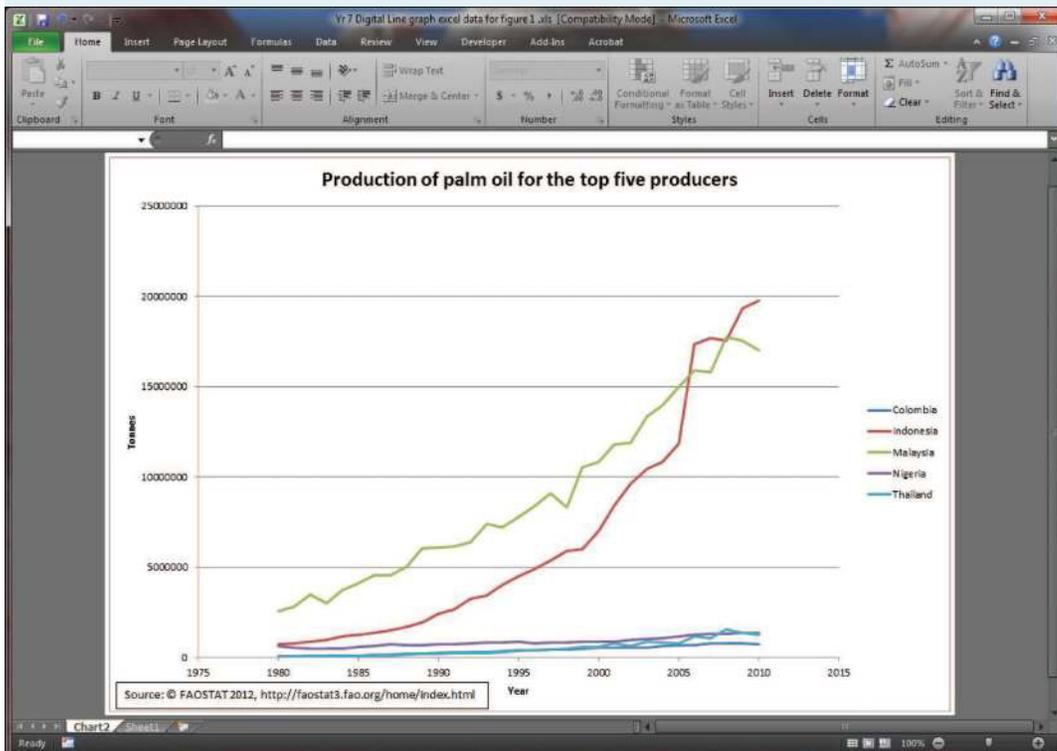


FIGURE 8 Include source details for the data you have used in your graph.



8.15.3 Let me do it

8.15 SkillBuilder activity ANALYSING

1. Use the data shown in **TABLE 1** to create a line graph using Excel.
2. Analyse your graph to answer the following questions.
 - a. What unit of measurement is used in this graph?
 - b. Describe the general trend of palm oil production from 1985 to 2010.
 - c. Suggest two possible causes for the change in palm oil production in 1998.
 - d. What has happened to palm oil production since 2008?

Checklist

I have:

- shown time on the horizontal axis
- labelled the axes
- included a key, if necessary
- provided a clear title and source information.

Table 1 Palm oil production in Malaysia, 1980–2010

Year	Tonnes of palm oil produced
1985	4 134 460
1986	4 542 250
1987	4 531 960
1988	5 027 500
1989	6 056 500
1990	6 094 620
1991	6 141 350
1992	6 373 460
1993	7 402 930
1994	7 220 630
1995	7 810 550
1996	8 385 890
1997	9 068 730
1998	8 319 680
1999	10 553 900
2000	10 842 100
2001	11 804 000
2002	11 909 300
2003	13 354 800
2004	13 976 200
2005	14 961 700
2006	15 880 700
2007	15 823 700
2008	17 734 400
2009	17 564 900
2010	16 993 000

LESSON 8.16 SkillBuilder: Using positional language online only

8.16.1 Tell me

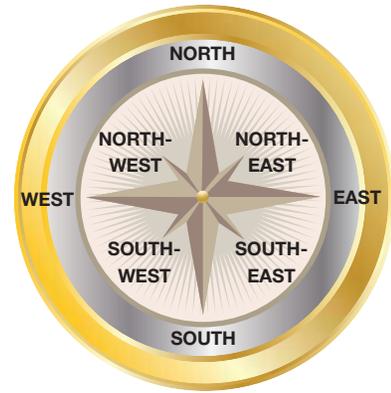
What is positional language?

Positional language uses compass points to locate places and provide directions between places. A magnetic compass will always point to north. All other directions are taken from this reference point. An 8-point compass — with points north, north-east, east, south-east, south, south-west, west, and north-west — is standard in most Geography books and atlases. A 16-point compass provides even further detail.

Why is positional language useful?

Positional language allows geographers to be accurate when giving directions and locations of places. It avoids the confusion that can occur with positioning if words such as left and right, up and down, top and bottom are used. No matter what direction you are facing, compass direction always remains the same, based around north.

FIGURE 1 An eight-point compass

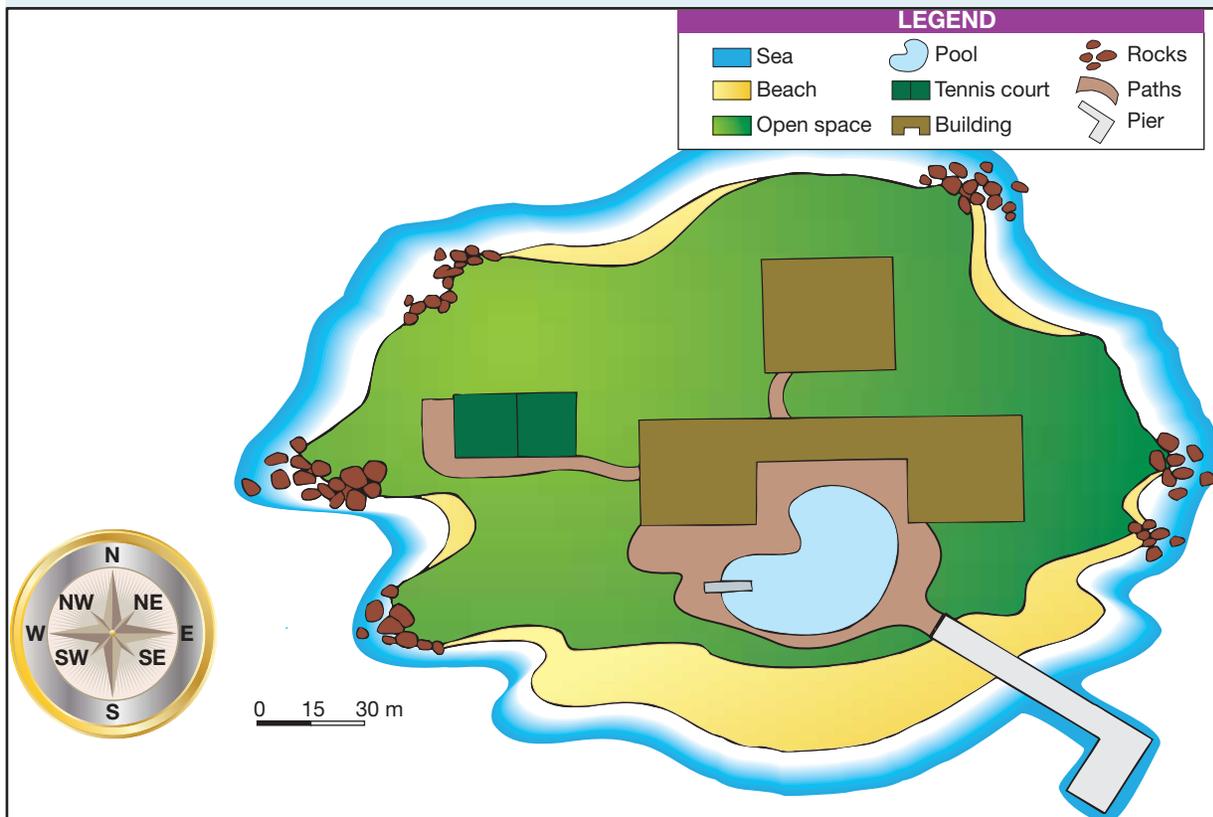


8.16.2 Show me

How to use positional language

Model

FIGURE 2 A cartographer's map of Holiday Island



As we check in at the main building for our stay on Holiday Island, a guide explains the features of the holiday resort.

'You arrived at the pier, which is to our south-east. On the way to this building you passed the paved poolside area, which is now to your south. There are four beach areas — the largest is to the south, a small moon-shaped beach is to the west-south-west and the other beaches are to the north-north-west and north-east across the open spaces.

You will need:

- a map (use **FIGURE 3**)
- a pencil
- tracing paper.

Procedure

Practise using the positional language of a 16-point compass with any type of map, such as in an atlas, a street map, a topographic map, a plan, a sketch, or an image such as aerial or oblique photos and satellite images.

Step 1

On the piece of tracing paper, draw a simple 16-point compass based on **FIGURE 1**. You will need to add the following points: NNE, ENE, NNW, WNW, SSE, ESE, SSW, WSW. Ensure that you mark the centre of the compass with a dot.

Step 2

Place the centre of the 16-point compass (the dot) on the point of origin from which a direction is being given. Ensure that north is in the vertical position. On all maps/images, unless an indicator determines otherwise, north is assumed to be vertical (i.e. pointing to the top).

For example, to discover that place A is north-north-west of place B, the direction is taken from place B, so the centre of the compass should be on place B.

Step 3

Read the compass direction from the centre dot to the place identified and write down that direction.

Step 4

The placement of the centre of the compass must be moved for each individual direction required.

8.16.3 Let me do it

8.16 SkillBuilder activity

QUESTIONING AND RESEARCHING

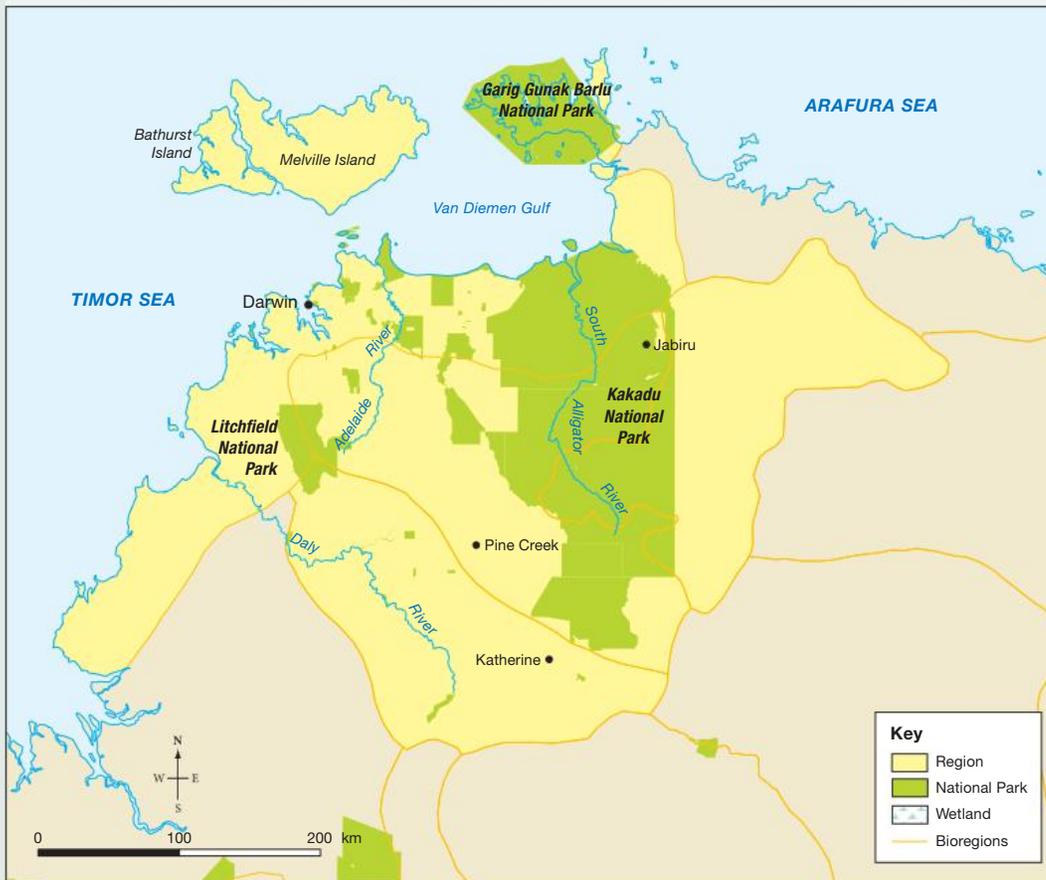
1. The completed example in **TABLE 1** uses the map in **FIGURE 3** to show directions from one place to another place.
In this example, you are at Kakadu National Park and you want to give a direction so that someone arrives at Litchfield National Park.
Copy the table below into your workbook. Using the map and your tracing paper compass, create five more examples of positional language in the table. Ensure that you use a range of directions from your 16-point compass.

TABLE 4 Examples of positional language

Place of origin	Place of arrival	Direction
Kakadu National Park	Litchfield National Park	West

Ask a class member to check your directions.

FIGURE 3 Map of Kakadu National Park



Source: Spatial Vision

2. Apply your skills to answer the following questions.
 - a. In which direction from Katherine would you need to fly to get to Kakadu National Park?
 - b. In what direction is Jabiru in Kakadu National Park from Darwin?
 - c. In what direction is Jabiru from Pine Creek?
 - d. If I was to drive from Katherine in a north-west direction, would I arrive in Jabiru or Darwin?

Checklist

I have:

- drawn and labelled an accurate 16-point compass
- used the compass to indicate direction using positional language.

SkillBuilder: Creating and describing complex overlay maps online only

8.17.1 Tell me

What is a complex overlay map?

A complex overlay map is created when one or more maps of the same area are laid over one another to show similarities and differences between the mapped information. All maps must be at the same scale. Laid over a base map with information that is consistent (for example, landforms), traced copies of maps showing variables (for example, population) allow you to see the elements underneath. Traditionally, the second map is on tracing paper that is attached to the original map.

Why are complex overlay maps useful?

Complex overlay maps are analysed to show relationships between factors — the similarities and the differences in a pattern. They are useful when looking for the degree to which features are arranged in a similar pattern. In a complex overlay map there may be three or more layers, allowing three or more variables to be compared. Complex overlay maps also help you work out between which features there is the strongest or weakest relationship or interconnection.

In today's world of computers, geographic information system (GIS) programs do this task. Digitally, layers can be turned 'off' and 'on' to show the interconnection between factors in a distribution pattern.

Complex overlay maps are useful for:

- town planners to see new settlement patterns overlaid on the land's shape
- construction engineers to see original buildings and the interconnection of extensions to a building
- logistic engineers to overlay the distribution of a number of features to identify similarities
- farmers to seek alternative planting rotations with an increased knowledge of the features involved, such as soil types, rainfall and topography.

A good series of complex overlay maps has:

- been drawn in pencil first, then coloured
- been drawn in light colours, so that the base map remains clear
- a key on each overlay, offset so each can be seen
- been accurately taped together so the maps overlap exactly
- labelled features, if necessary
- included BOLTSS.

A clear description of complex overlay maps has:

- identified and communicated key features
- clearly represented and communicated the data.

8.17.2 Show me

How to create and describe a complex overlay map

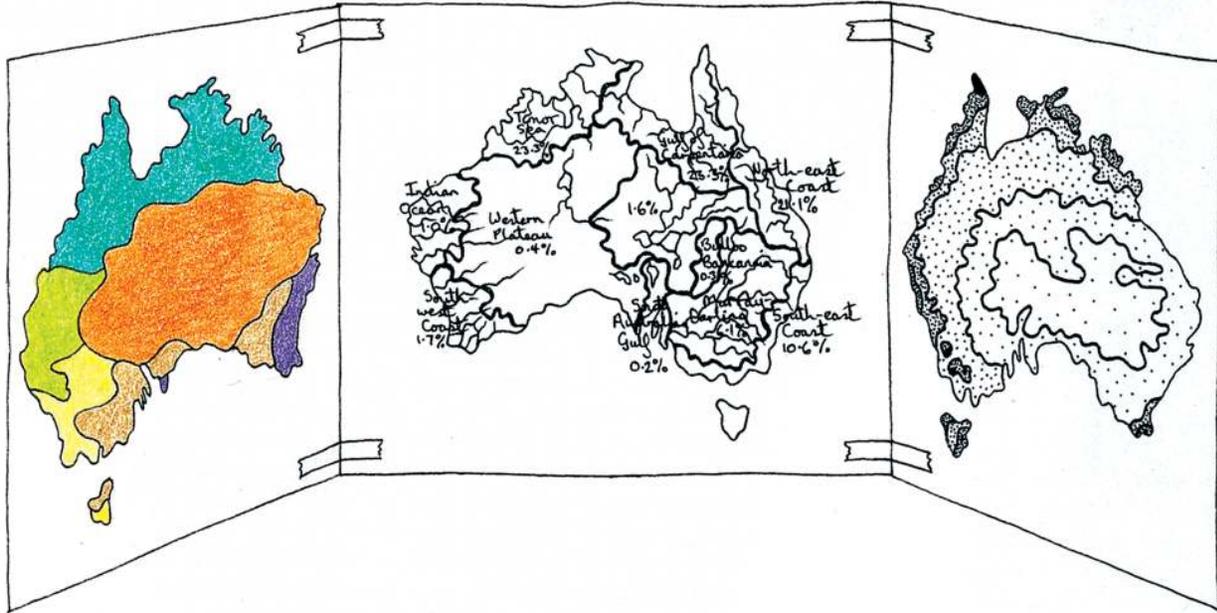
You will need:

- three maps of the same region at the same scale showing different information (one to be a base map)
- one of these maps to act as a base map
- two pieces of tracing paper, at least as large as the base map
- a light grey pencil and coloured pencils
- a ruler
- an eraser
- adhesive tape.

Model

FIGURE 1 shows a map of Australia's drainage catchments used as the base map (centre) in a complex overlay. Taped to this on tracing paper is a map of Australia's average annual rainfall (shown at right in **FIGURE 1**), attached so as to be able to fold onto the base map. Taped to the opposite side of the base map is a map of Australia's seasonal rainfall patterns (shown at left in **FIGURE 1**). This is also attached so as to be able to fold onto the base map. Additional layers could be added by taping further maps (drawn on tracing paper) to the top and bottom of the base map.

FIGURE 1 An illustration of a completed complex overlay map showing Australia's seasonal rainfall patterns (left), drainage catchments (centre) and average annual rainfall (right)



This series of map overlays provides an example of interconnection; in this case, the interconnection between annual rainfall and seasonal rainfall, between annual rainfall and drainage catchments, and between seasonal rainfall and drainage catchments.

Further analysis is required to show areas that are not connected and areas that are sometimes related, but not always. For example, the Murray–Darling Basin drainage catchment has a wide range of seasonal rainfall patterns across its area, varying from uniform rainfall to arid zones.

Procedure

To complete and describe complex overlay maps you must have two or more maps of the same place and at the same scale with different information. For this example, we will use maps showing Australia's drainage catchments (**FIGURE 2a**), Australia's average annual rainfall (**FIGURE 2b**) and Australia's seasonal rainfall patterns (**FIGURE 2c**).

Step 1

Select the base map — this will show information that is unlikely to vary. In this instance, it is the drainage catchments. You may need to trace the base map if it appears in a book, because it might not be possible to stick other maps to the original.

Step 2

Trace each of the other maps onto separate sheets of tracing paper. Don't forget to include BOLTSS on your maps. Each map should have its own title, its own key and its own source. The scale and north pointer need to appear only on the base map.

Step 3

Using adhesive tape, hinge the maps to fold on top of each other so that the map outlines (coastlines) match up. Alignment is very important, so choose obvious borders to line up. **FIGURE 3** shows the second map hinged to the right of the base map. **FIGURE 4** shows the third map added, hinged to the left of the base map.

Step 4

You are now able to lift each map separately from the others to see the information individually, or view two or more maps combined.

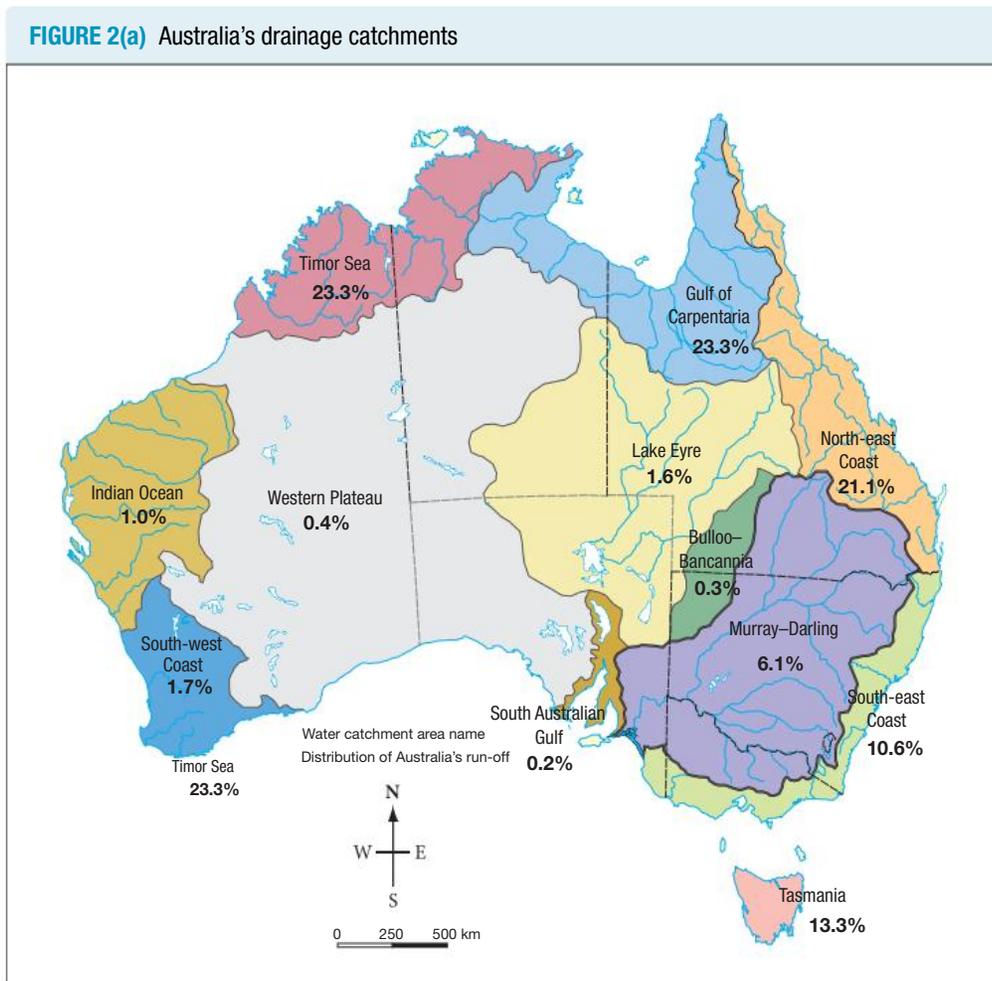
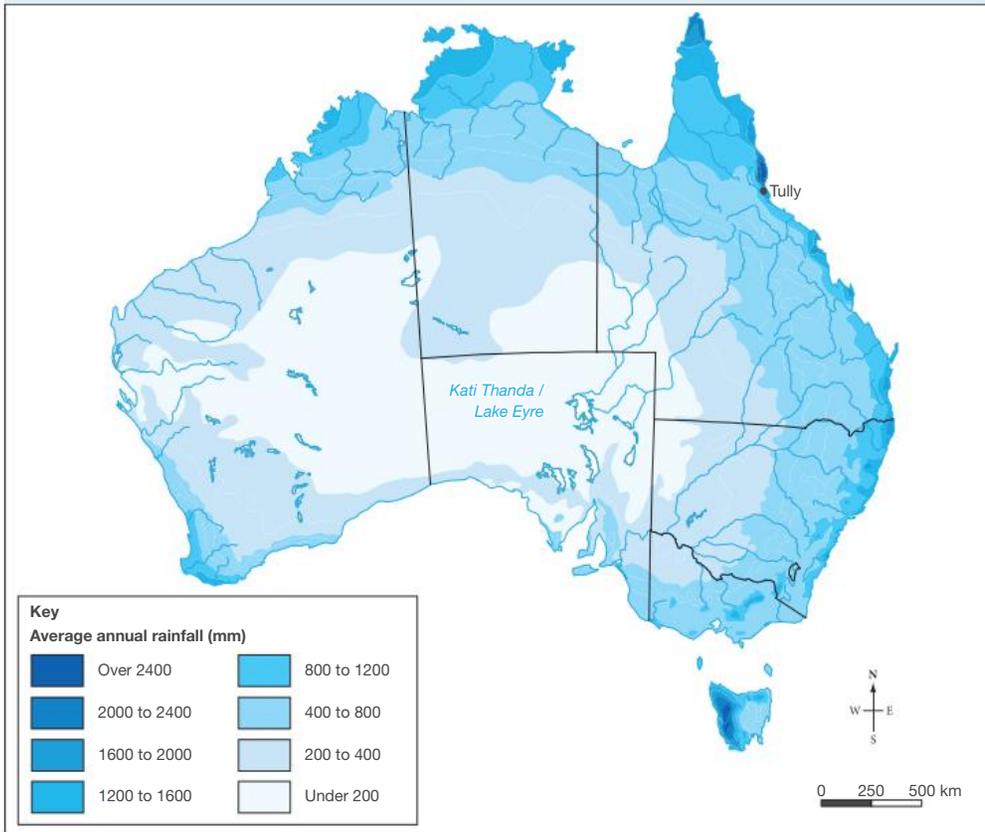
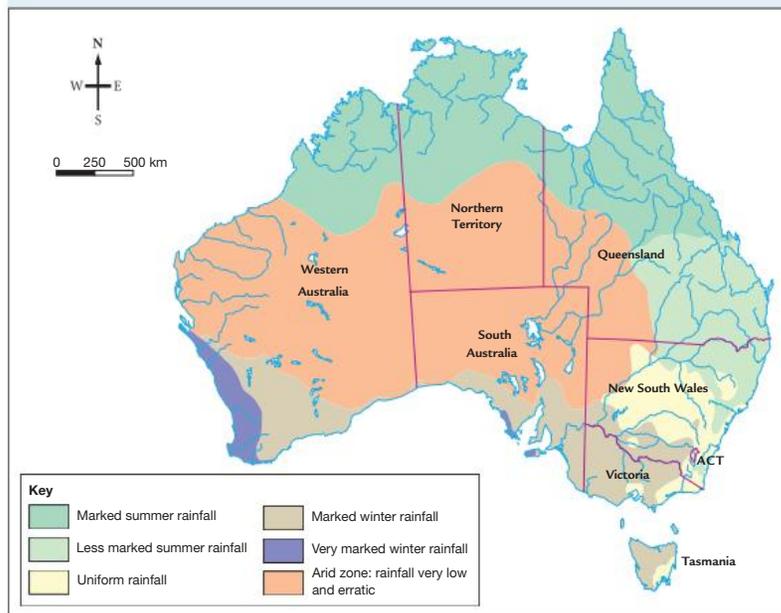


FIGURE 2(b) Australia's average annual rainfall



Source: Bureau of Meteorology, 2003, on the Australian Water Map, Earth Systems Pty Ltd

FIGURE 2(c) Australia's seasonal rainfall patterns



Source: MAPgraphics Pty Ltd, Brisbane

FIGURE 3 Hinged map (first overlay) over base map

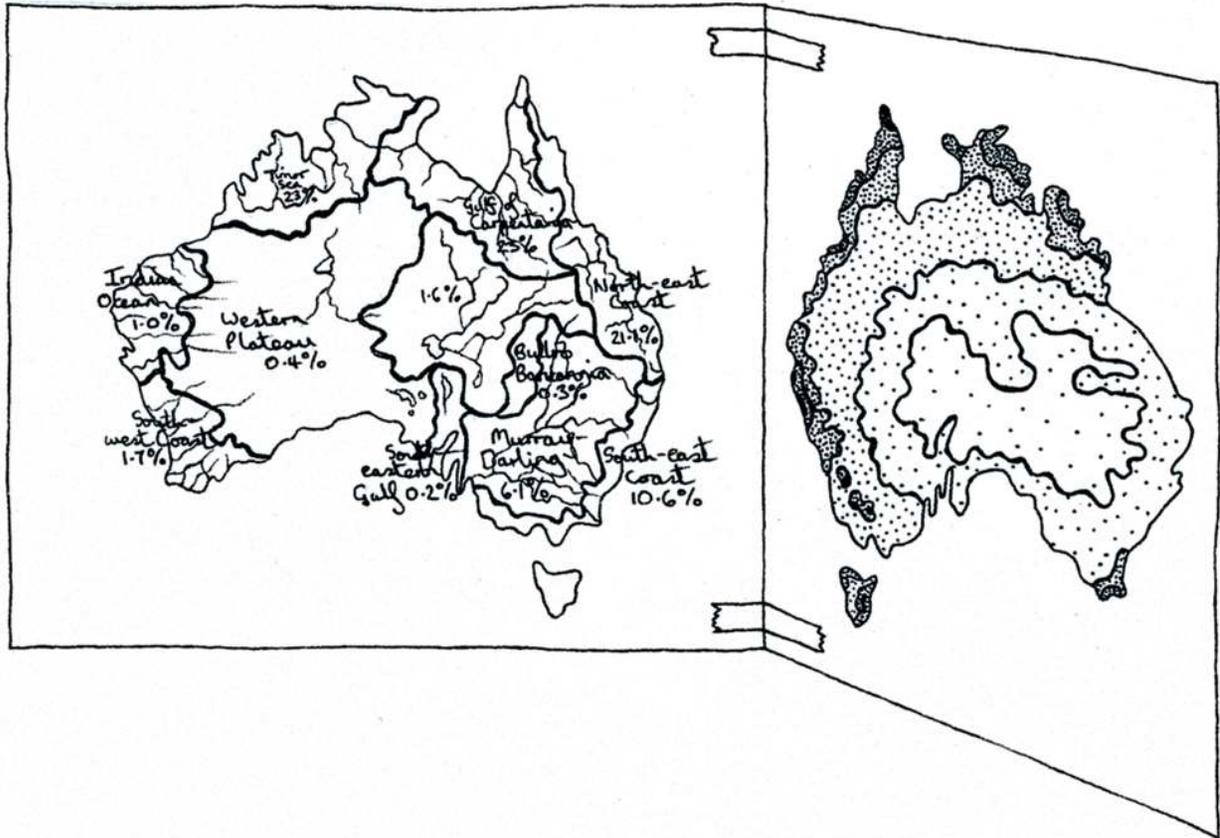
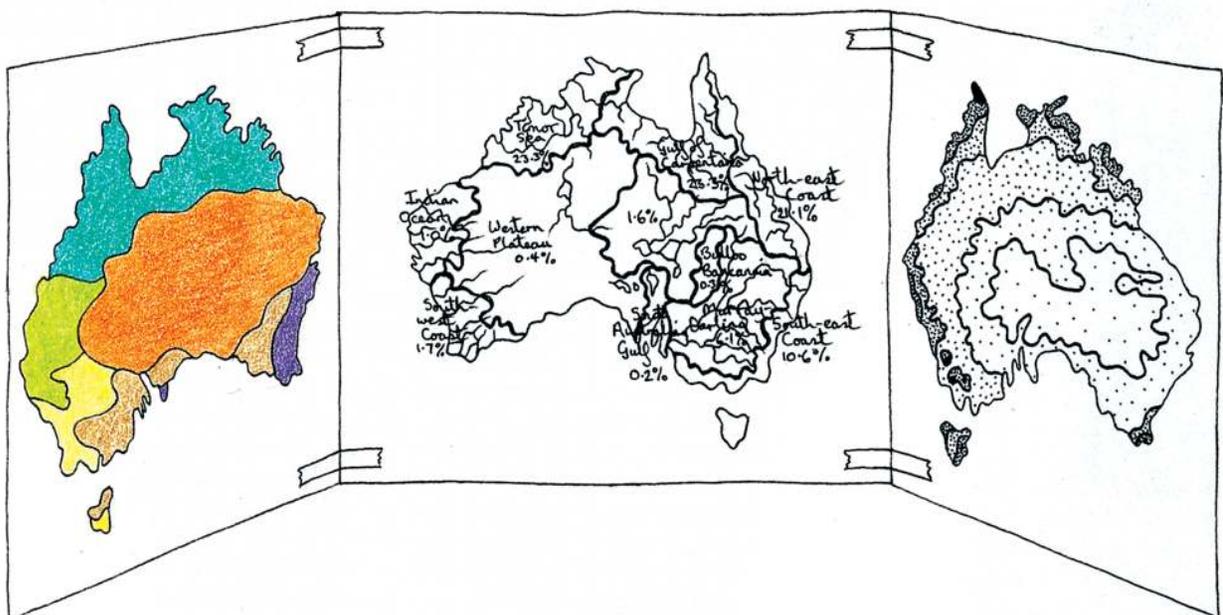


FIGURE 4 Two maps hinged to a base map, forming a complete overlay map shown prior to folding



Step 5

To analyse the information that the overlay maps show, you should comment on where there is a relationship or interconnection of features. Lay any two maps together and identify any similar patterns. Write a sentence about these similarities. Then lay all three maps together, identify any similar patterns and write a sentence about these. An example is that the area with less than 400 mm of rainfall forms the arid zone, with erratic rainfall across the Western Plateau and Lake Eyre catchments.

Step 6

Next, look for significant differences across two maps. Write a sentence about these differences. Then look for significant differences across the three maps and write a sentence about these. For example, the very marked winter rainfall in south-west Western Australia does not produce greater annual rainfall than that in western Tasmania and near Tully, Queensland.

Step 7

Now go through the process again looking for unusual occurrences; that is, where things appear random and show no interconnection. An example is that the Murray–Darling Basin drainage catchment has a wide range of seasonal rainfall patterns across its area, varying from uniform rainfall to arid zones.

8.17.3 Let me do it

8.17 SkillBuilder activity EVALUATING

1. Use **FIGURE 5**, which shows the topography of Borneo, and **FIGURES 6 and 7**, which show orangutan distribution in 2015 and rainforest distribution in 2020. Create an overlay map to show the *interconnection* between topography, rainforest distribution and orangutan distribution. Use the checklist to ensure you cover all aspects of the task correctly.
Note: You will need to make your base map (from **FIGURE 5**) to the same scale as **FIGURE 6 and 7**. To do this, draw a 3 × 3 grid over the base map, then draw a smaller 3 × 3 grid on a piece of paper — this new grid should be the same size as **FIGURES 6 and 7**. Working one grid square at a time, sketch a copy of the base map into the new smaller grid.
2. Apply your skills in describing a complex overlay map by answering the following questions.
 - a. Is there a pattern (relationship or *interconnection*) between the location of the highest land and rainforest distribution in Borneo?
 - b. Is there a pattern (relationship or *interconnection*) between the location of rainforests and the distribution of orangutans in Borneo?
 - c. Are there any areas in Borneo where there is no relationship between rainforest distribution and orangutan numbers?
 - d. On what type of land might rainforests be found in the future?
 - e. Between which of the following two features is the strongest relationship?
 - High land and rainforest distribution
 - High land and distribution of orangutans
 - Rainforest distribution and the orangutan population.
 - f. What would explain this strong relationship?

FIGURE 5 Topography of Borneo



Source: Spatial Vision

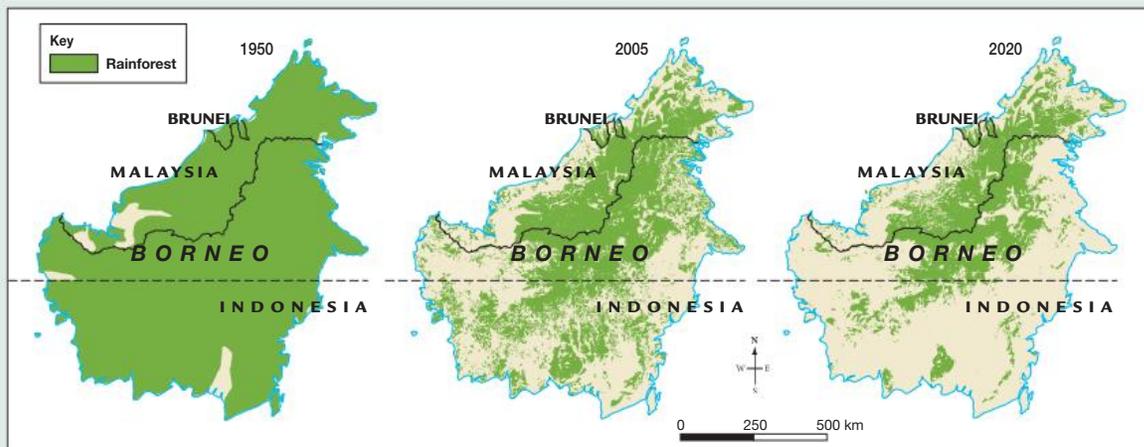


Figure 6 Orangutan distribution in Borneo, 1930–2015



Source: IUCN Red list

Figure 7 Rainforest distribution in Borneo, 1950–2020



Source: Spatial Vision

Checklist

In creating my complex overlay map, I have:

- drawn in pencil first, then coloured
- used light colours, so that the base map remains clear
- placed a key on each overlay, but offset it so each can be seen
- created hinges with adhesive tape at appropriate spots
- labelled features, if necessary
- included BOLTSS.

In describing my complex overlay map, I have:

- identified and communicated key features
- clearly represented and communicated the data.

LESSON 8.18 SkillBuilder: Creating and reading pictographs online only

8.18.1 Tell me

What is a pictograph?

A pictograph is a graph drawn using pictures to represent numbers, instead of the bars or dots that are traditionally used on graphs. Data can be drawn vertically or horizontally. Each picture is given a value.

Why are pictographs useful?

A pictograph is a simple way of representing data and conveying information quickly and efficiently in a different format. It is very visual for the reader.

Pictographs are useful for:

- simplifying data
- showing differences between data
- presenting data.

A good pictograph has:

- been drawn in pencil
- used clear and simple pictures or graphics of the same size.

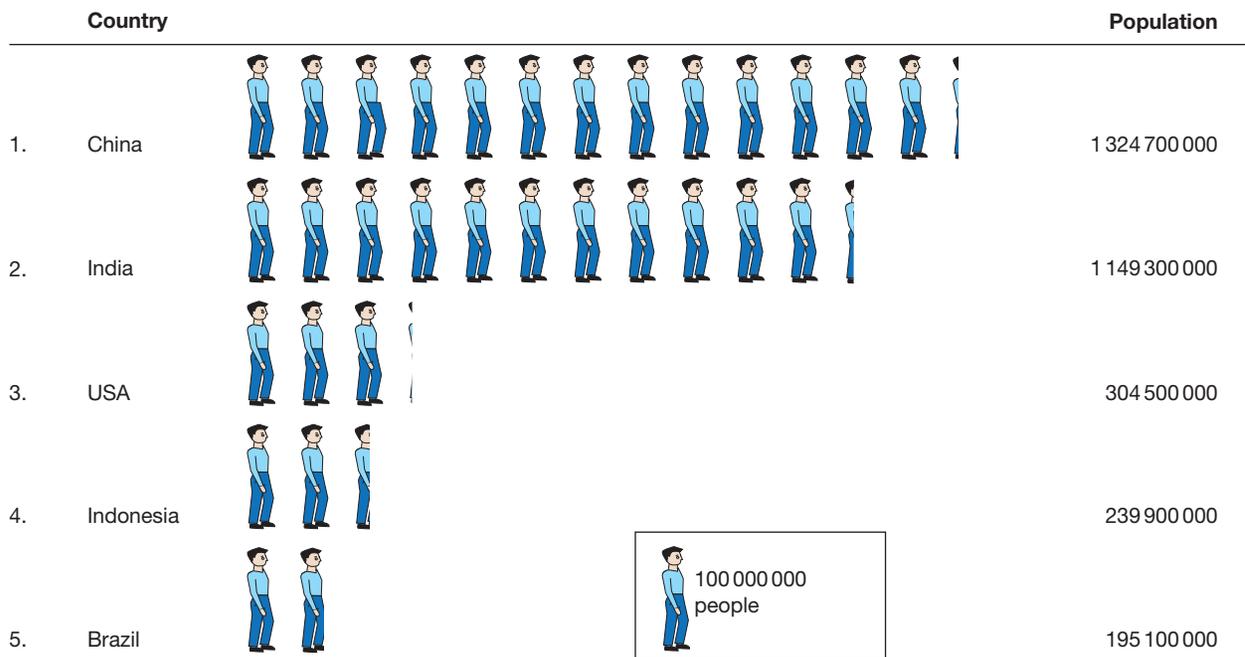
8.18.2 Show me

How to create and read a pictograph

Model

FIGURE 1 is a pictograph that shows that the populations of China and India are large in comparison to those of other countries. The populations of the United States and Indonesia appear to be similar, but the key shows that each complete symbol (person) represents 100 million people, so in fact there is a large difference in the population sizes. Indonesia's population is almost 250 million, while that of the United States is over 300 million.

FIGURE 1 Top five countries by population, 2008



You will need:

- a basic set of data
- a piece of paper on which to draw the pictograph
- a light grey pencil
- coloured pencils
- a ruler.

Procedure

To complete a pictograph you need a small set of data on one theme to graph.

Step 1

Decide on a simple picture to represent the data that you are going to graph. For example, you might decide to use stick figures to represent numbers of people, fish if your data is about fishing, or dollar signs if your data concerns money.

Step 2

Consider the data and determine a number that each picture should represent. In **FIGURE 1**, the drawing of one person is equivalent to 100 000 000 people in a population. Choose a scale that will not require

too many pictures for each part of the graph, and check what the size of the graph will be when your representations are included. The pictograph must fit on the page or in the space you have available.

Step 3

Draw lines on your page, equal distances apart, to represent each variable (for example, country or year) for which you have data. On these lines you need to draw the appropriate number of pictures.

Step 4

Spend some time doing calculations to determine how many pictures you need to represent each number. Notice in **FIGURE 1** that 'part people' are used. For example, half a person in the pictograph would represent 50 000 000 people. Think about how your pictograph will show 'parts of the whole' to represent the data you are plotting.

Step 5

Complete your pictograph with its drawings. Ensure that the key is in place and that the pictograph has a clear title.

Step 6

Reading a pictograph requires you to carefully analyse the data provided. Check the title and the key, and determine the numbers represented by the graph. Write a few sentences summarising what the pictograph tells you. For example, **FIGURE 1** shows that the populations of China and India are large in comparison to those of other countries.

8.18.3 Let me do it

8.18 SkillBuilder activity

COMMUNICATING AND REFLECTING

1. Use the data below to draw a pictograph of the 10 cities with the largest populations. Use the checklist to ensure you complete the task correctly.

Rank	City	Country	Population (rounded figures, 2011)
1	Tokyo	Japan	35.7 million
2	Mexico City	Mexico	19.0 million
2	Mumbai	India	19.0 million
2	New York City	United States	19.0 million
5	São Paulo	Brazil	18.8 million
6	Delhi	India	15.9 million
7	Shanghai	China	15.0 million
8	Kolkata	India	14.8 million
9	Dhaka	Bangladesh	13.2 million
10	Jakarta	Indonesia	13.2 million

2. Apply your skills to answer the following questions.
 - a. What did you immediately notice when you first looked at your completed pictograph?
 - b. Which cities did you not expect to see on this list? Why?
 - c. Which country did you think would contain one of the 10 cities with the highest populations, but does not?
 - d. How much larger is Tokyo than Mexico City?
 - e. Sydney is Australia's largest city (5.7 million in 2019). Add Sydney to your pictograph. What do you notice?

Checklist

I have:

- drawn in pencil
- used clear and simple pictures or graphics of the same size.

8.19.1 Tell me

What is meant by 'describing a photograph'?

A description is a brief comment (up to a paragraph) on a photograph, identifying and communicating features from a geographic point of view. Sometimes it is necessary to infer information from a photograph; for example, a cloud of dust in an image may tell us that the climate is dry, or that the place is experiencing drought, or that some movement disturbed the soil at the time the photograph was taken.

Why is describing photographs useful?

Photographs record the details of a place at a particular moment in time. As geographers, we use our understanding of the world to interpret the image and tell others about the main features or information the photograph reveals.

- comparing features before and after a disaster
- showing land features when planning town expansions
- explaining about a place and the way people use space
- revealing the living conditions of people on the other side of the world.

A good description of a photograph:

- includes an overview of the main features
- has considered the angle of photography — aerial, oblique or ground
- has tried to identify the place in the photograph
- notes other relevant information from the photograph
- acknowledges the anomalies in the image (those things that seem out of place)
- includes any written information that came with the photograph
- has considered the time of the day and the date when the photograph was taken
- has looked for visual clues of *scale* (e.g. comparisons with people or building heights)
- clearly communicates what you want the viewer to notice or see in the photograph
- has considered whether there is evidence of bias from the photographer, especially with the size of the image.

8.19.2 Show me

How to interpret photographs

Model

FIGURE 1 is a ground-level photograph of a city, which shows a mix of traditional buildings of about 10 storeys in height and modern sky scrapers of at least double that height. You can see an inner-urban area with traffic lights, street vendors and one-way streets. A lone tree is struggling to grow in the shade of the buildings. Some of the people may be tourists, as the man in the light-coloured shirt seems to be looking around as he walks. It appears to be a warm day, because people are wearing short-sleeved shirts and sunglasses, and some buildings are casting shadows onto others. You can tell that people are at work in these offices, because the lights are on in many levels of the buildings. The street name (W 56 St) tells the viewer that this is a street in New York. It is likely that the photograph was taken within the last 15 years, because the man in the foreground wears earphones and is listening to music while he walks.

You will need:

- a photograph of a built or natural environment.

Procedure

To interpret a photograph, you must have a geographic photograph of a place. Begin by using the 'See, Think, Wonder' technique.

Step 1

See

What can you see? Look for all the main details. What takes up most of the space? Look for all the small details. What are you wanting or needing to point out in this image? Do not try to explain anything. Make a list of the things that you can see. In **FIGURE 1**, this list would include high-rise buildings, traffic on the roads, pedestrians, street signs and more.

Step 2

Think

What do you think is happening? What do you think about it? Make a list of what you think. In **FIGURE 1**, you might think it is early morning and workers and tourists are in the street, going about their daily activities. Perhaps you think that the high-rise buildings contain offices within which people are beginning their work for the day.

Step 3

Wonder

What is the mystery? What do you wonder about this image? For example, in **FIGURE 1**, why are all the streets one way? Make a list of what you wonder about.

Step 4

Is there any information with the photograph? For example, information might be given about the photographer or when the image was taken. Does the photograph appear with an article?

Step 5

Have you determined where the place is? Can you suggest in which region of the world the photograph is taken, even if the exact country or place is difficult to decide? As you develop your geographic understanding, you will gain impressions from images. In **FIGURE 1**, the street name (using numbering) on the sign indicates that this is a city in the United States, probably New York.

Step 6

What does the light in the image indicate about the time of day when the photograph was taken? Are there any shadows? Are there any indications as to whether the sun is high in the sky, rising in the early morning, or setting in the evening? This might tell you about the activities of people at a particular time of day. In **FIGURE 1**, the light comes from an angle and so appears to be the light of early morning.

Step 7

Is this a recent or an old photograph? Clothes, cars and other items in the image, such as appliances, can help to date the photograph. Sometimes photographs have dates embedded in the corner of the image. **FIGURE 1** shows a man walking with earphones in, listening to a personal media player. This technology has only been widely available for around 15 years.

FIGURE 1 A modern city environment



Step 8

At what angle is the photograph taken — aerial, oblique or ground? Think about why the photographer may have used this angle. Does the background information add to your understanding of the photograph? Think about the things that you cannot see. For example, what types of office work might happen in the buildings in **FIGURE 1**?

Step 9

Do you need to make a statement about the height of any objects in the photograph? Is there an item from which you can reference height? In **FIGURE 1**, each floor of a building represents about four metres.

Step 10

Ask yourself whether you think the photographer may be using bias in the photograph; that is, has the photographer unfairly influenced the image? Is it likely that left and right or top and bottom of this image show the same scene, or has the photographer selected these elements to tell a particular story?

In **FIGURE 1**, bias does not seem to be apparent. The photographer has included what the eye can see. Look at **FIGURES 2 (a)** and **(b)** — is the story the same in both images?

FIGURE 2 (a) appears to be a scene of a peaceful rural or parkland environment. When the full image is shown in **FIGURE 2 (b)**, it becomes apparent that this place is part of a very urban space, in the centre of a large city.

FIGURE 2 (a) A peaceful rural environment? **(b)** Central Park, New York City

(a)



(b)



8.19.3 Let me do it

8.19 SkillBuilder activity ANALYSING

Go online to look at a photographs of the Kibera slum in Nairobi, Kenya. Explore the details of the photographs. Interpret the image by answering the following questions. Use the checklist to ensure you cover all aspects of the task.

- What activities are being carried out in the slum?
- Describe the buildings in the slum, including size, construction techniques, building materials and density of buildings.
- Describe the possible movement of people through the slum.
- What additional information would you like to have about this place, especially considering the presence of the multistorey buildings in the background?
- Write a paragraph of text to describe the Kibera slum, following the steps outlined in the Procedure.

Checklist

I have:

- included an overview of the main features
- considered the angle of photography — aerial, oblique or ground
- tried to identify the place in the photograph
- noted other relevant information from the photograph
- acknowledged the anomalies in the image (those things that seem out of place)
- included any written information that came with the photograph
- considered the time of the day and the date when the photograph was taken
- looked for visual clues of *scale* (e.g. comparisons with people or building heights)
- clearly communicated what I want the viewer to notice or see in the photograph
- considered whether there is evidence of photographer bias, especially with the size of the image.

LESSON 8.20 SkillBuilder: Constructing a basic sketch map online only

8.20.1 Tell me

What is a basic sketch map?

A basic sketch map is a map drawn from an aerial photograph or developed during fieldwork. It identifies the main features of an area and is different from a *précis* map, in which the cartographer opts to include or leave out certain features.

Why are basic sketch maps useful?

Basic sketch maps are used to show the key elements of an area, so other more detailed characteristics are not shown.

They are useful for:

- summarising an idea for presentations about a feature
- identifying and communicating key features or characteristics of an area.

A basic sketch map has:

- been drawn in pencil
- not tried to show everything in great detail
- been coloured using a key
- included BOLTSS.

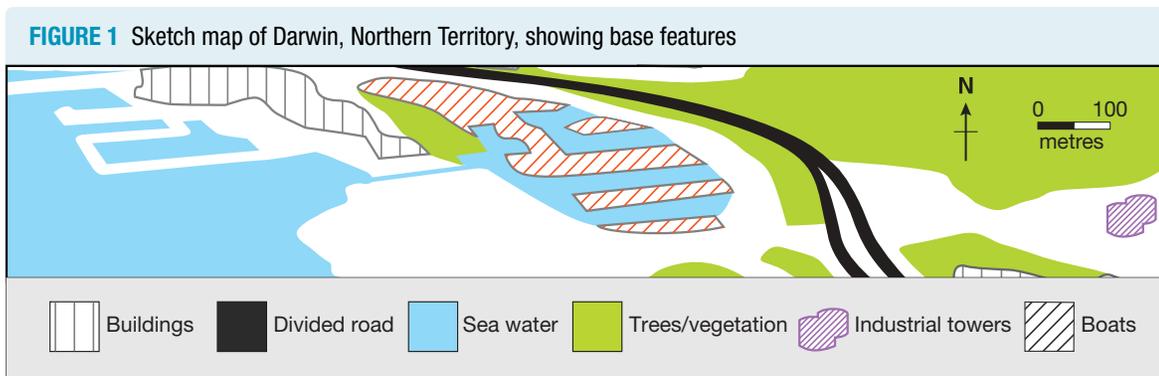
8.20.2 Show me

How to construct a basic sketch map

You will need:

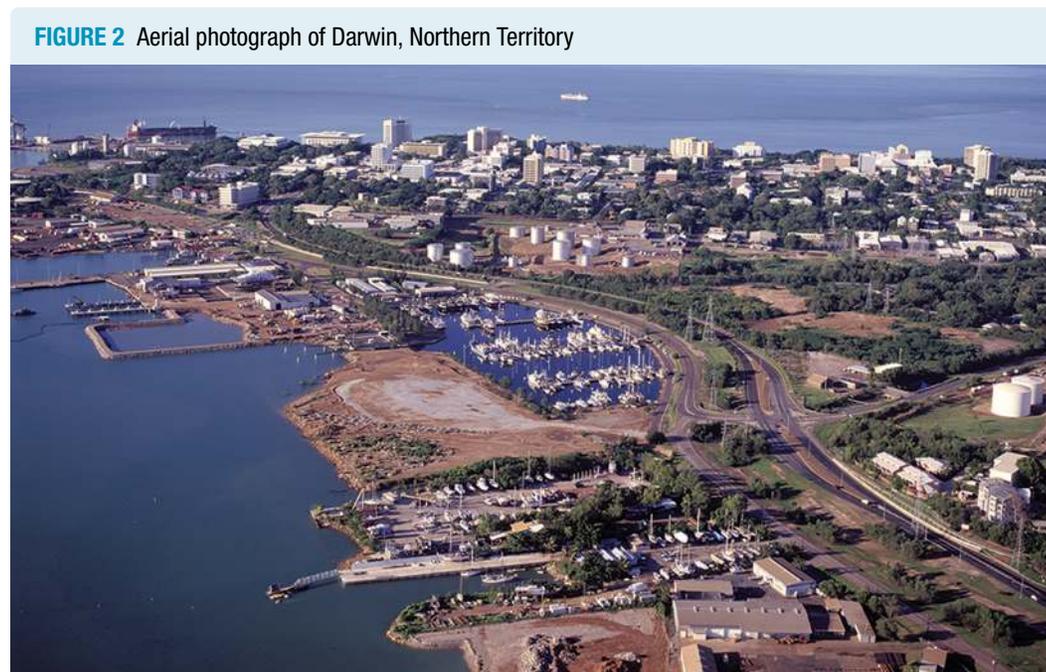
- an aerial photograph
- a piece of paper on which to draw the map
- a light grey pencil
- coloured pencils
- a ruler
- an eraser.

Model



Procedure

To complete a basic sketch map from an aerial photograph of a place, complete the following steps.



Step 1

Determine the relevant area of the aerial photograph that you want to use to make a basic sketch map.

FIGURE 3 The area for the sketch map is identified.



Step 2

Rule a border on your page within which to create your map. Keep the border the same size as the area of the photograph you are planning to draw, to avoid scale issues.

Step 3

Identify the feature(s), and their extent, that you are going to transfer onto your basic sketch map. Look for both natural and human features. In **FIGURE 3**, we can identify buildings, a divided road, sea water, trees and vegetation, industrial towers, and boats.

Step 4

Create a colour-coded key for each feature and place it near the map. If you want to use appropriate symbols, choose those too. For example, a red cross might be a suitable symbol to represent a hospital. You can add to your key as you go.

Step 5

Inside the border, draw an outline of the base features of the area, such as rivers, coastlines and major roads. These will guide your colouring.

Step 6

Individually, take each of the features that you have identified and mark on your base map the approximate area that it covers. When you have completed one feature, colour it before moving to the next feature. This will prevent confusion with colouring other features.

Step 7

You may wish to label some significant features of the sketch map. This should be done neatly and horizontally.

Step 8

Complete the simplified sketch map with BOLTSS.

8.20.3 Let me do it

8.20 SkillBuilder activity

COMMUNICATING AND REFLECTING

1. Using the aerial photograph of Darwin shown in **FIGURE 2**, complete a basic sketch map of the city and its *environments*. Use the checklist to ensure you have completed the task correctly.
2. Use your sketch map to answer the following questions.
 - a. Describe the natural *environment* of Darwin. Mention the base features that you used to make your sketch.
 - b. What type of buildings make up the greatest proportion of the built *environment* of Darwin?
 - c. Suggest two reasons for the focus of the city on marine activities.
 - d. There is vacant land to the right of the coastal road. On your sketch map, shade the land use that might appear here in 20 years' time. Justify your shading using labelling placed on your sketch map.
 - e. How does this city compare to the *place* in which you live?

Checklist

I have:

- drawn in pencil
- not tried to show everything in great detail
- used colour with a key
- included BOLTSS.

9 Landforms, landscapes and hazards

LESSON SEQUENCE

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LESSON 9.1 Overview

INQUIRY QUESTION

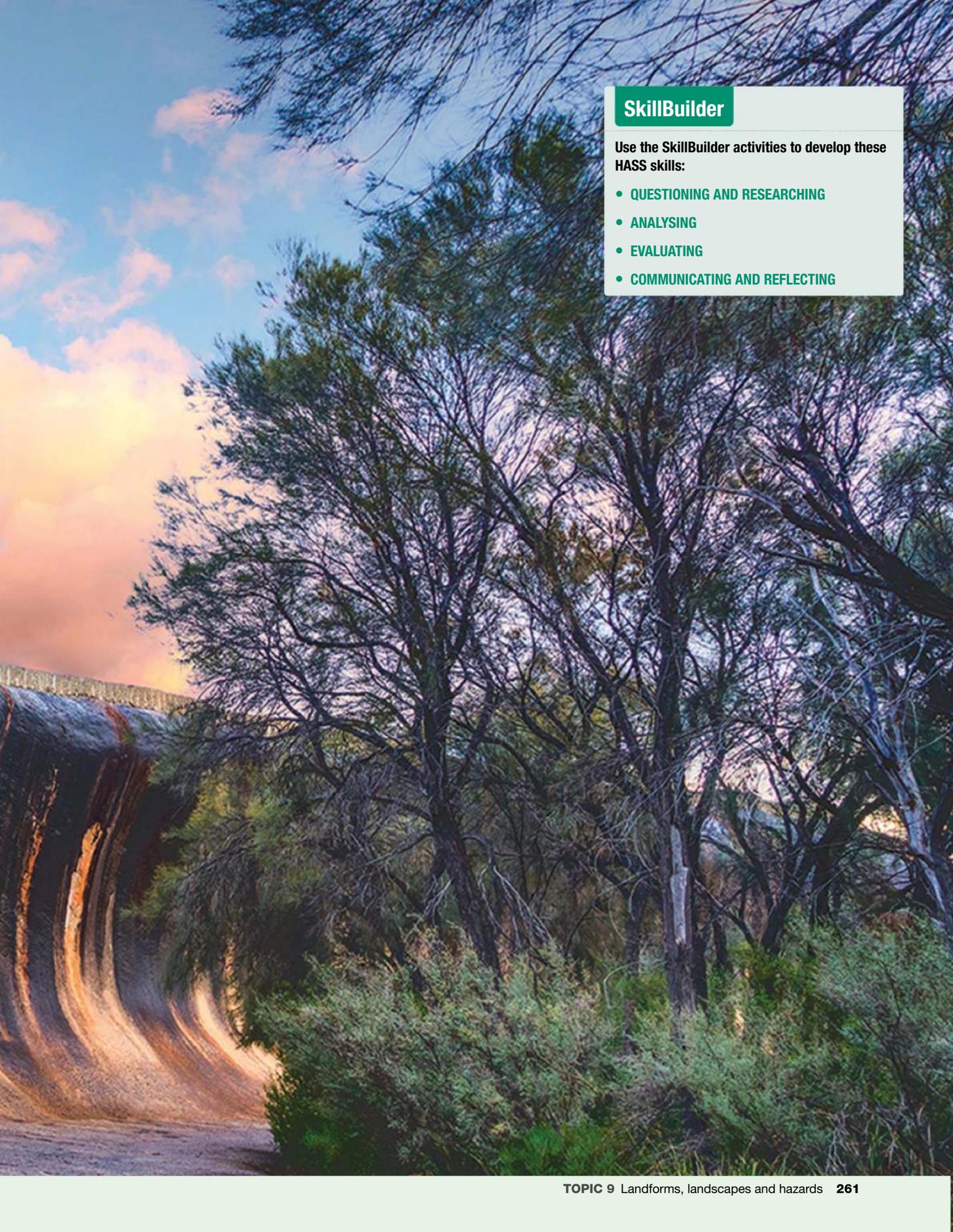
How do human and natural processes shape environments and what impacts does this have on the way people manage changing landscapes?

Landscapes are the visible features of the land, from the icy polar regions and lofty mountains of Nepal through the grasslands of Tanzania, forests of Brazil, deserts of central Asia to the coastal plains. They have been shaped by **physical processes** over millions of years and overlaid by the presence of humans. Some forces that shape our planet come from deep within the Earth — earthquakes and volcanoes — while others sculpt the surface.

Water is a powerful agent in creating landscapes. Its immense power can knock you off your feet, move buildings and carve huge holes in the Earth's surface. Landscapes created by water are found everywhere.

learn on

-  **Pre-test**
Online pre-test
-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital document**
Key terms glossary
-  **Video eLesson**
Landforms, landscapes and hazards



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

LESSON 9.2 Different types of landscapes

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** different types of landscapes
- **distinguish** landscapes as part of the natural or built environment
- **explain** why landscapes differ
- **explain** the processes that create landscapes and why they change over time.

Tune in

The images in **FIGURE 1** are arches. Each is a feature of a specific landscape found in Australia. Similar features are found in other parts of the world. However, this is not how they looked in the past.

FIGURE 1 (a) Nature's Window, Kalbarri National Park, Western Australia (b) Admirals Arch, Kangaroo Island, South Australia (c) Elizabeth Quay Bridge, Swan River, Western Australia



1. What processes do you think created the landscape features shown? Justify your response.
2. Describe how you think these features looked one million years ago.
3. Explain how one of these features might change over the next one million years.

9.2.1 Types of landscapes

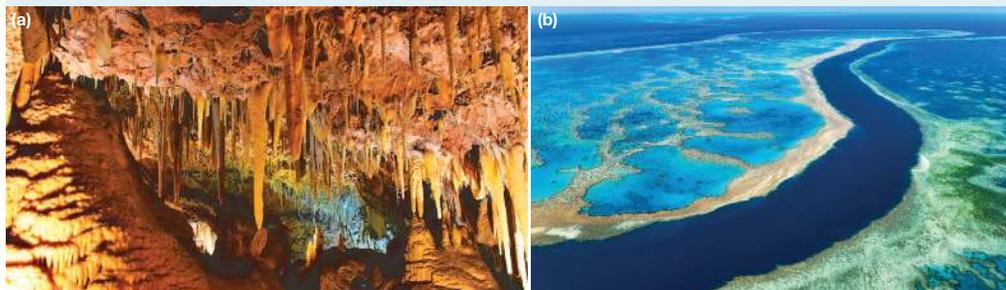
The Earth has a variety of landscapes with regional similarities. Differences are influenced by factors such as climate, geographical features (such as mountains and rivers), latitude, human impact and location.

SkillBuilder discussion

Communicating and reflecting

1. Describe the landscapes in **FIGURE 2**.
2. These landscapes are both protected. Why do you think this is?
3. How do you think these landscapes were formed?

FIGURE 2 The Ngilgi Cave formations in Western Australia are protected, due to their historical and cultural significance. (a) The Ngilgi Cave formations in Western Australia (b) The Great Barrier Reef in Queensland

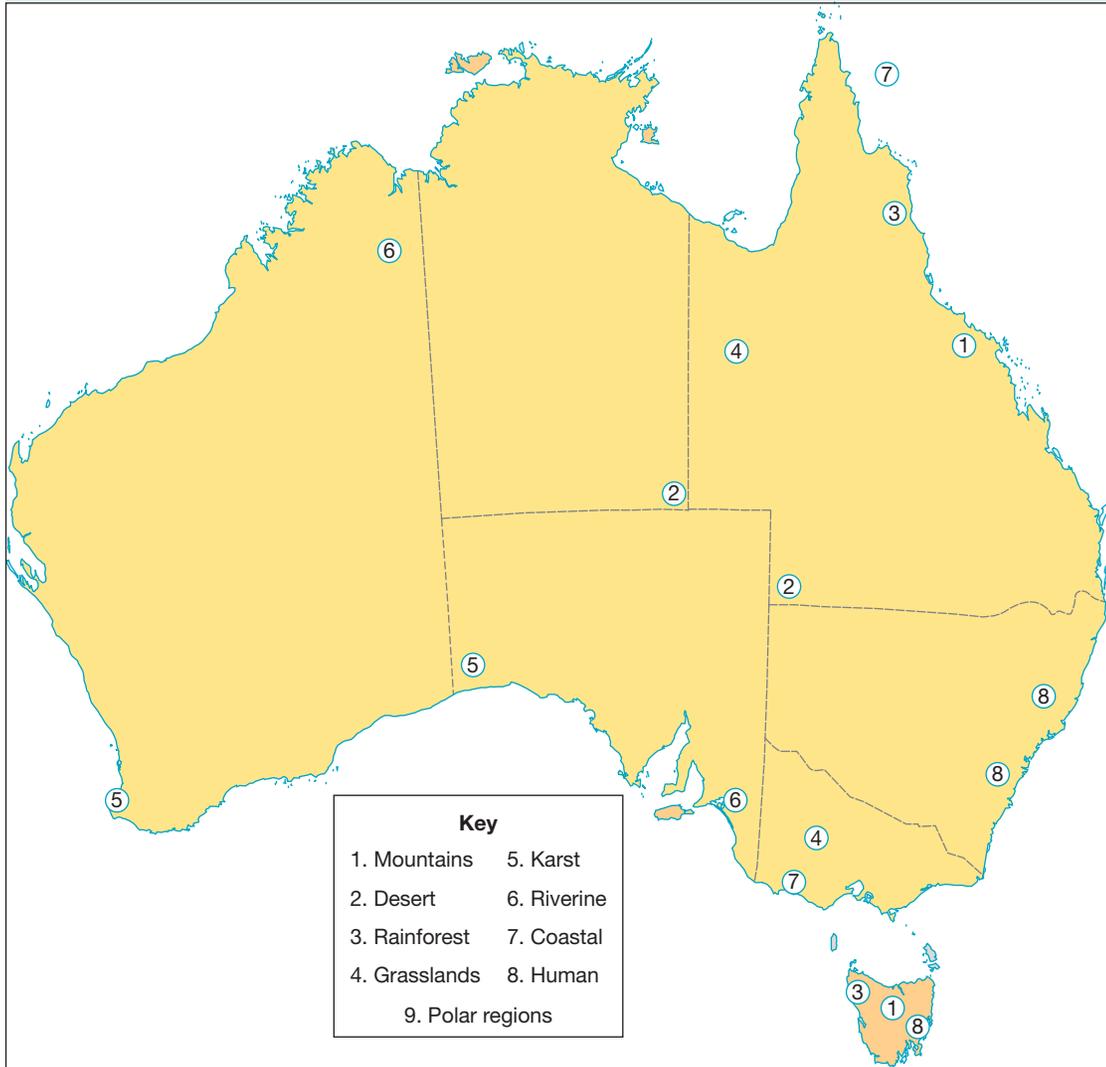


Did you know?

The Great Barrier Reef can be seen from space. At 2300 kilometres in length, it is one of the largest and most visible natural features on Earth.



FIGURE 3 Selected Australian landscapes



- 1 Mountains** such as the Great Dividing Range and Tasmanian Highlands rise above the surrounding landscape. They often have high peaks and steep sides. They are the result of processes operating deep inside the Earth and are slowly being worn away.
- 2 Deserts** are the dry or arid regions, characterised by low rainfall and temperature extremes. Examples include the outback (Australia's arid interior), Simpson Desert and Sturt Stony Desert.
- 3 Rainforests** are areas of high rainfall, ranging from the hot wet tropics to the cooler temperate areas. They are the most diverse landscape on Earth, home to 50 per cent of all known plant and animal species. Additionally, many of our foods and medicines come from rainforests. Example in Australia are the Daintree Rainforest and Tarkine Rainforest.
- 4 Grasslands** or savannas are sometimes seen as a transitional landscape between forests and deserts. They are characterised by grass with few trees and are inhabited by grazing animals. Australian examples include the Victorian Volcanic Plains and the Mitchell Grass Downs.
- 5 Karst** landscapes form where mildly acidic water flows over soluble rock such as limestone, leading to the development of underground drainage systems, karst **aquifers** and stunning cave formations. Examples include the Nullarbor Plain and Ngilgi Cave.
- 6 Riverine** landscapes are found on land and include lakes, rivers and wetlands, such as the Coorong Wetlands and Ord River.
- 7 Coastal** landscapes are the saltwater regions of the world and include coral reefs and oceans. Notable Australian examples include the Great Barrier Reef and Port Campbell.
- 8 Human** landscapes have been altered or changed by people, usually for agriculture or to build cities and their infrastructure. Examples include Port Arthur, Parliament House in Canberra and the Sydney Opera House.
- 9 Polar regions** are characterised by **permafrost** and **glaciers**. Australia does not have polar regions, but the Australian Alps and Tasmanian Highlands are covered in snow in winter.

FIGURE 4 Most Australians recognise these landscapes.



9.2.2 Why do landscapes change?

Natural processes such as tectonic uplift, **erosion**, **deposition** and **weathering** continuously shape the Earth's surface and what lies below. People change landscapes when they clear the land for agriculture or to build cities and road networks.

Did you know?

The Earth's crust consists of a series of plates that fit together like a jigsaw puzzle. These plates sit on a layer of semi-molten material in the Earth's **mantle**. Heat from the Earth's core creates **convection currents**, causing the plates to move.

FIGURE 5 After the land has been uplifted, other processes take over and resulpt the landscape



1 Weathering is the breakdown of rocks due to the action of rainwater, temperature change and biological action. The material is not transported (removed).
It can be physical, chemical or biological.

2 Erosion is the process whereby soil and rocks are worn away and moved to a new location by agents such as wind, water or ice.

3 Transportation is the process that moves eroded material to a new location — examples include soil carried by the wind, sediment or pebbles in a stream.

4 Deposition — materials moved by wind and water eventually come to a halt. Over time new landforms are built. Sand dunes and beaches are common landforms associated with deposition.

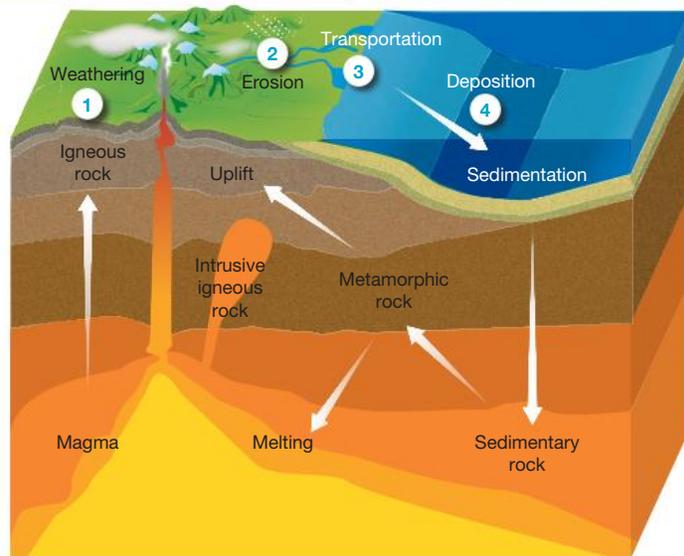
Physical — occurs where water is continually freezing and thawing. The water penetrates cracks and holes in the rocks. As water freezes it expands, making the cracks larger. Over time the rock breaks apart.



Chemical — some rocks, such as limestone, contain chemicals that react with water, causing the limestone to dissolve.



Biological — living organisms such as algae produce chemicals that break down rocks. They can also be forced apart by plant roots.



SkillBuilder discussion

Analysing

1. Look at **FIGURE 5**. Write your own definition of tectonic forces and compare it with those of other members of your class.
2. Why do you think earthquakes and volcanic eruptions occur?

Did you know?

Human activity, such as deforestation, agriculture, urban sprawl, logging and road construction, alters the natural balance and may increase erosion by up to 40 per cent in some areas.

9.2 SkillBuilder activity

COMMUNICATING AND REFLECTING

1. Your objective is to create a television commercial showcasing the landscape shown in **FIGURE 6**. Your target group is aged 20–25.
Present your commercial as a PowerPoint, or oral presentation with visual aids.
2. Research a location with notable landscapes and investigate at least four of the following:
 - Location
 - Climate
 - Striking natural features
 - Unique or interesting animal and/or plant species
 - Specific cultural or historical human aspects

Presentation tips: use geographical language when referring to your chosen place. Tailor your content to appeal to your target audience. Use persuasive language and information to entice travellers to your destination.

FIGURE 6 A peaceful and idyllic place to interact with nature



Learning pathways

■ LEVEL 1

1, 2, 3, 7

■ LEVEL 2

4, 5, 8

■ LEVEL 3

6, 9, 10

REMEMBER AND UNDERSTAND

- Identify the difference between the terms *natural environment* and *built environment*.
 - Natural environments are created or altered by humans, whereas built environments are not.
 - Built environments are created or altered by humans, whereas natural environments are not.
- True or false? Altitude, latitude, geographical features and climate are examples of factors that do not make landscapes different.
- From the following, identify four human or built environments.
 - Forests
 - Zoos
 - Camping grounds
 - Caravan parks
 - Grasslands
 - Farms
- Explain** why people change landscapes.
- Select** two of the landscapes featured in this lesson and **outline** how they are different.

ANALYSE AND APPLY

- Copy the following table into your workbook.

Characteristics	How it formed	How people use it	Positive impacts	Negative impacts	Human impacts, both positive and negative

- Select** one of the landscape types described in this lesson and complete the table, stating the positive and negative aspects of human use.
 - Identify** which list is larger — the positive impacts or negative impacts.
 - Review the column of negative impacts. **Identify** three of these impacts and **propose** a way in which the environment could be used more sustainably.
- Examine** the natural processes at work shaping the Earth and complete the following passage.

erosion	corrosion	deposition	transportation	weathering	deportation
---------	-----------	------------	----------------	------------	-------------

- _____ refers to the process of eroded or weathered material being moved to new locations by agents such as wind, water and ice. _____, on the other hand, refers to materials being dropped in new locations and may result in new landforms being created.
 - _____ is the process whereby soil and rocks are worn away and moved to a new location by agents such as wind, water or ice. _____ refers to the breakdown of rocks due to the action of rainwater, temperature change and biological action.
- Explain** which of the featured landscapes you would like to know more about. **List** the questions that you would like to have answered.

EVALUATE AND COMMUNICATE

- Evaluate** the comment that rainforests are the most diverse landscape on Earth.
- Identify** the featured landscape that you think would be the least diverse. **Justify** your answer.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** coastal features created by erosion
- **identify** coastal features created by deposition
- **distinguish** between the impact of wave action and running water
- **distinguish** between constructive and destructive waves.

Tune in

FIGURE 1 The black sands of Reynisfjara, Iceland



1. What geological process do you think has caused this sand to be black?
2. How might wave action change this beach?
3. Do you think there are similar beaches in Australia? Give reasons for your answer.

9.3.1 How do waves change the environment?

The coast is the zone or border between land and ocean. It is the collision zone where the movement of seawater and the impact of the ocean create coastal landscapes. Coastal erosion is mostly caused by wave action. Waves are caused when wind blows over the ocean. The size of the wave depends on wind strength and the distance it travels (referred to as the **fetch**). A strong wind and long fetch create powerful **destructive waves**, which can strip beaches and erode the landscape. A gentle wind with a small fetch will create less powerful **constructive waves**, which may deposit sand on the coast and create depositional landforms.

If the **swash** is more powerful than the **backwash**, the waves are constructive, and depositional landforms will be present. On the other hand, if the backwash is more powerful than the swash, the waves will be destructive, and erosion will be evident (**FIGURE 2**).

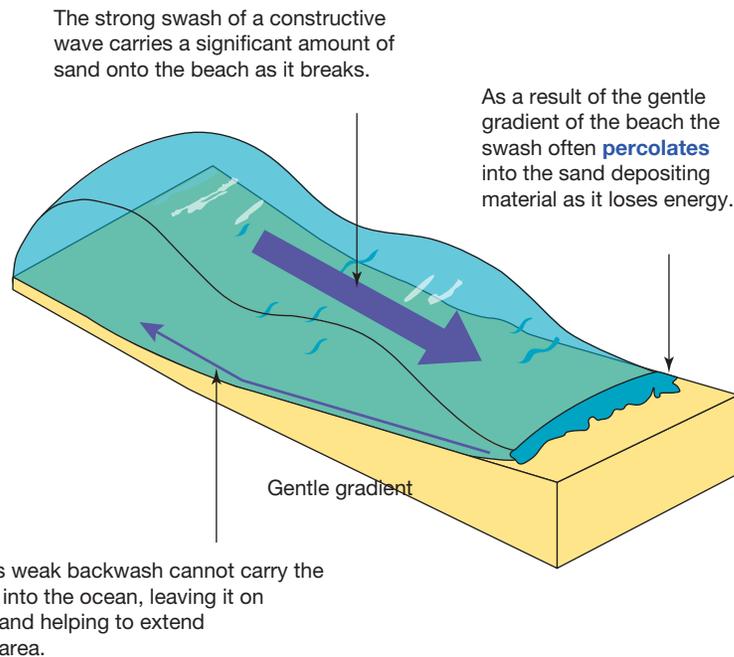
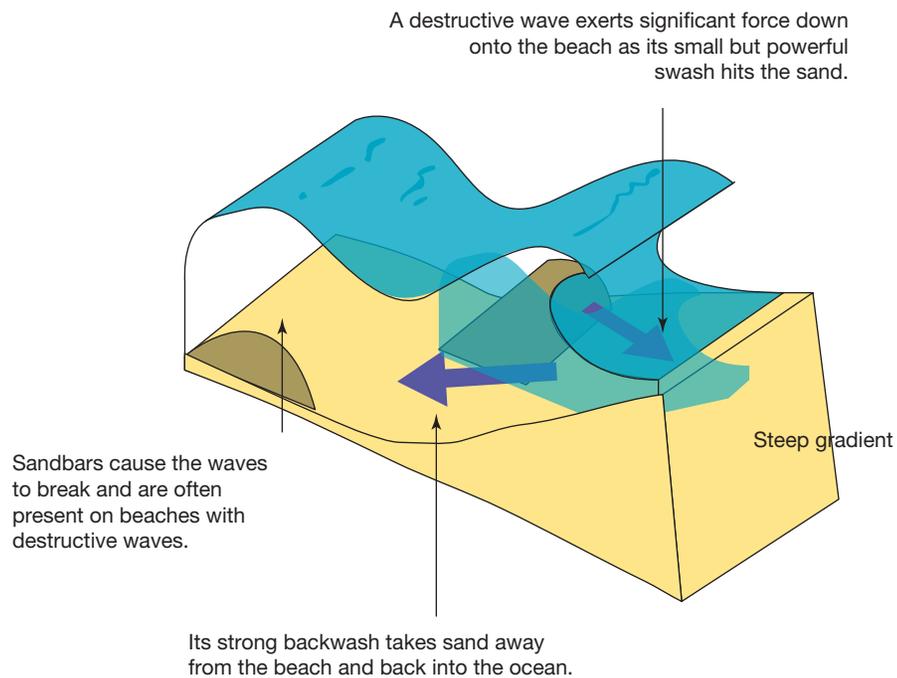
SkillBuilder discussion

Analysing

1. Explain the difference between constructive and destructive waves.
2. Why are sandbars associated with beaches that have destructive waves?
3. Will a sandy beach be created by constructive or destructive waves? Justify your answer.



FIGURE 2 Comparing constructive and destructive waves

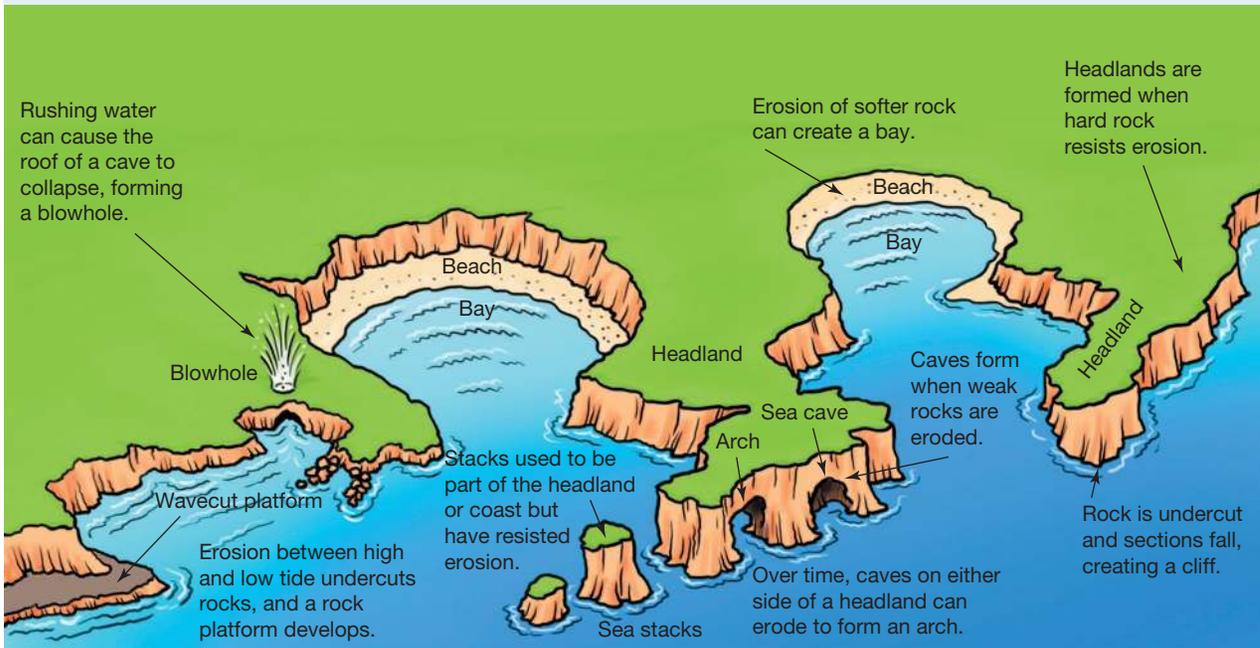


Coastal landforms are shaped by more than just wave action. Rainfall, winds and physical processes like evaporation — which leaves behind salts that interact with rocks — contribute to changes, potentially forming crevasses. Other factors include natural events like earthquakes and volcanoes, fluctuating sea levels, and human activities such as construction projects.

9.3.2 Which coastal landscape features are created by erosion?

Coastal features like cliffs, headlands and caves form as rainfall and wave action erode weak cliff spots, creating notches that develop into caves. Continued erosion causes cliffs to collapse, while water forms deep channels. Destructive waves reshape sandy coastlines by removing sand, destroying dune vegetation and damaging protective structures.

FIGURE 3 Coastal landforms created by erosion



SkillBuilder discussion

Evaluating

1. Why would people choose to build their home in this location?
2. What do you think will happen to these homes over time?
3. Do you think people should be allowed to build homes on a cliff face? Give reasons for your answer.

FIGURE 4 Destructive waves erode the coastline.



9.3.3 What is the role of deposition in coastal environments?

Constructive waves lack the force of destructive waves, but still play a vital role in shaping and forming coastal landforms. They deposit materials like sand, shells, coral and pebbles on the shore. Over time, these materials form beaches, spits, dunes, lagoons and other features (**FIGURE 5**).

Additionally, material from eroding cliffs and river silt might also be **transported** to the coast. Dried by the sun, sand is blown inland to create dunes (**FIGURE 6**).

FIGURE 5 Depositional landforms: coastal landforms created by deposition

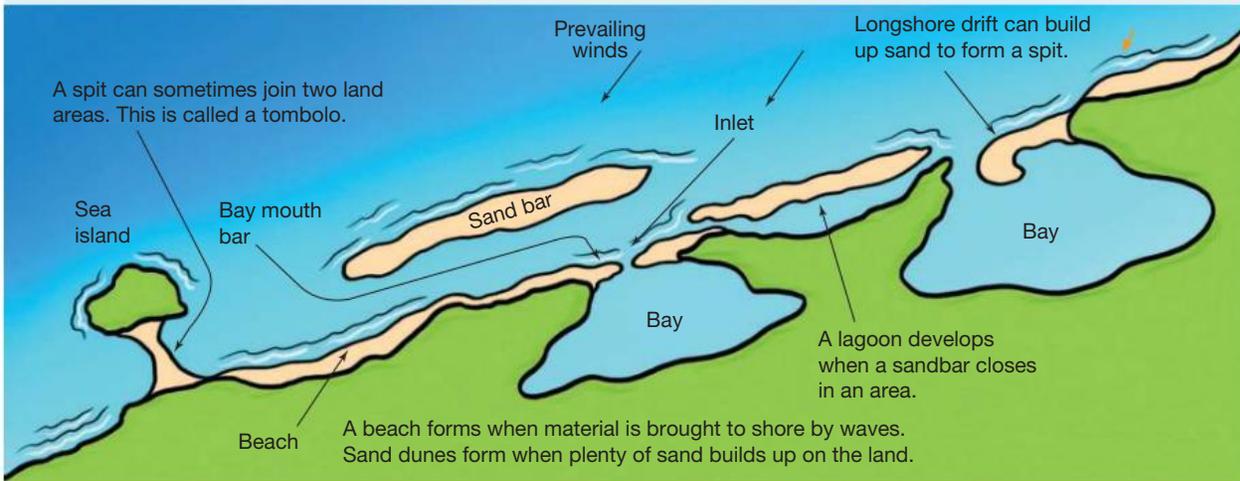
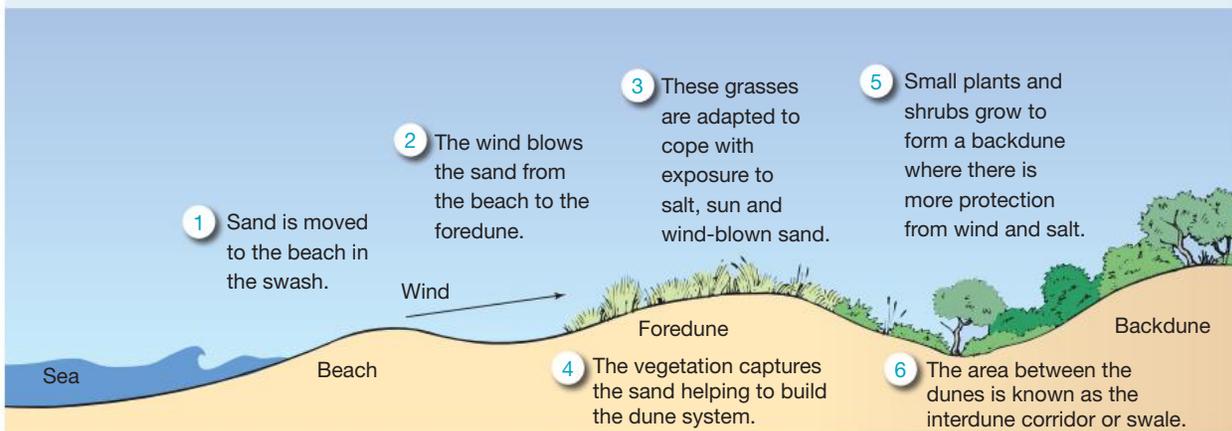


FIGURE 6 The formation of sand dunes



Beach material is shifted by wind and waves. The wind influences the angle at which the waves move towards the coast. Waves come from the direction of the **prevailing winds**. Waves approach the shore at an angle and their swash pushes material onto the beach at an angle. The backwash returns to the sea in a straight line, creating a zigzag pattern of movement.

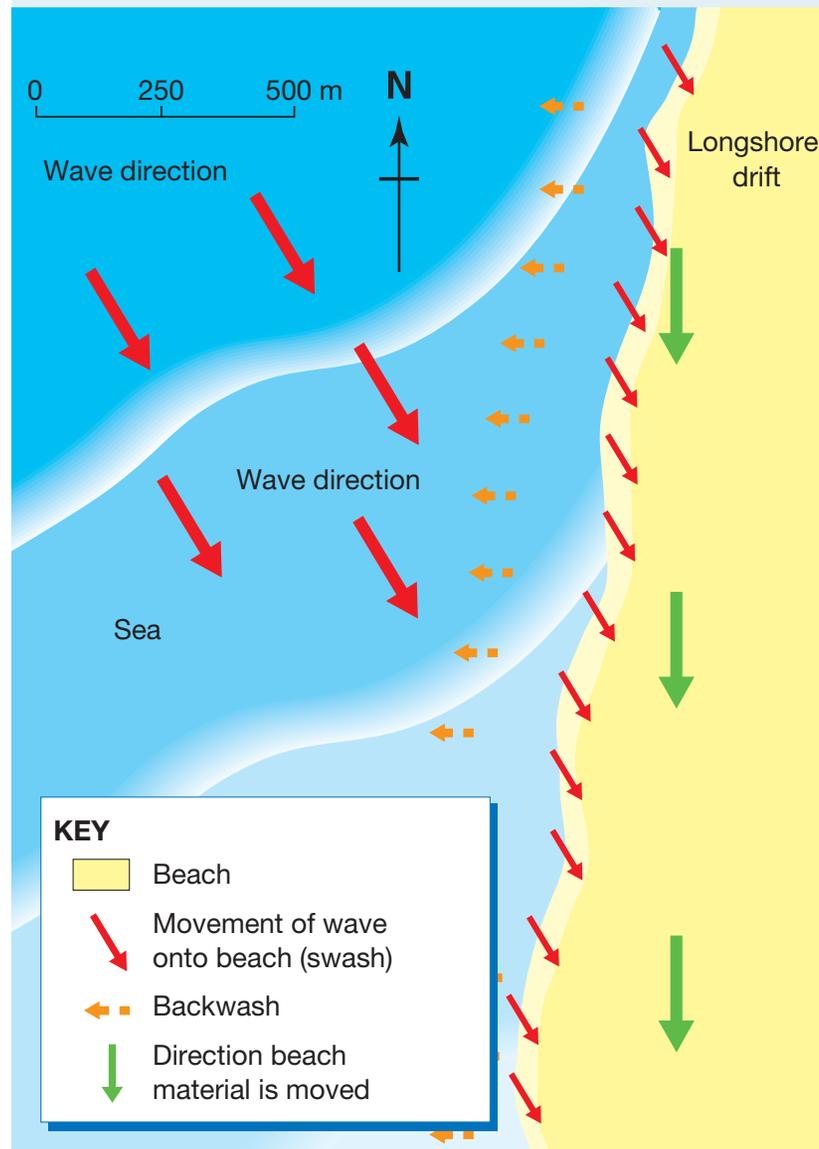
This process of material moving along the beach is known as **longshore drift**, and it creates features such as spits and sandbars. If the prevailing wind changes direction, so does the direction of longshore drift.

SkillBuilder discussion

Analysing

1. Use the compass shown on the map in **FIGURE 7** to answer the following questions.
 - a. Identify the direction of the swash.
 - b. Identify the direction of the backwash.
 - c. Identify the direction of longshore drift.
2. If this pattern continues, predict what feature might develop at the southern end of the beach. Give a reason for your answer.
3. Is this an example of constructive or destructive wave action? Explain.

FIGURE 7 The process of longshore drift



CASE STUDY

Cape Peron

Cape Peron in Western Australia's Shoalwater Islands Marine Park is a prime example of a **tombolo** — a landform created when a sand spit joins one island to another or the mainland.

At the end of the last ice age, some 10 000 years ago, Cape Peron was part of a limestone ridge which created high points along the coast. Rising sea levels created a chain of islands and wave action moved sand between the islands, forming a **cusped spit**. Over the last 2000 years, this process has created a tombolo, connecting Cape Peron to the mainland. Today, the same process is joining Penguin Island to the coast by a sandbar. A tombolo typically forms in areas with constructive waves that are sheltered from prevailing winds, resulting in sandy beaches such as those along the eastern shore of Cape Peron.

Erosion is evident in other parts of the marine park. Cape Peron's western shore includes erosional landforms such as cliffs, arches and collapsed bridges. These locations are exposed to prevailing winds and destructive waves. Reefs and offshore stacks are also present in the west (**FIGURE 8**).

FIGURE 8 Coastal landforms at Cape Peron



9.3 SkillBuilder activity **COMMUNICATING AND REFLECTING**

This lesson requires you to create several examples of annotated diagrams, such as **FIGURES 2** and **5**.

1. Create your own annotated diagram showing at least six erosional or depositional landforms, or a combination of both landform types.

Depositional landforms		Erosional landforms	
<ul style="list-style-type: none"> • a spit • a beach • sand dunes • a bay • sandbar or ridge 	<ul style="list-style-type: none"> • a delta • an estuary • a tombolo • a lagoon 	<ul style="list-style-type: none"> • a cave • a cliff • an arch • a stack • a blowhole 	<ul style="list-style-type: none"> • a rock platform (wave-cut platform) • a headland (point, cape or promontory)

2. Annotations should include details of how each was formed.
3. Find two examples of each landform from various parts of the world and add them to your diagram. Include the location of each feature in your annotations.

9.3 Exercise

learnon

Learning pathways

■ **LEVEL 1**

1, 4, 5

■ **LEVEL 2**

3, 6, 7, 8

■ **LEVEL 3**

2, 9, 10

REMEMBER AND UNDERSTAND

1. Select the correct term: A **beach / coast / river / cliff** is the zone or border between land and ocean.
2. List the following landforms in the order in which they would be created:
 - a. arch, cave, headland, stack
 - b. blowhole, cave, cliff
3. **Explain** the difference between constructive and destructive waves.

4. Identify where beach-building material comes from. **Select** all answers from the options provided.
 - a. Rivers
 - b. Lakes
 - c. Eroding cliffs
 - d. Offshore
 - e. Wind
5. **Identify** the correct terms in the following sentences: Longshore drift moves material along the beach in a **circular / zigzag** pattern that follows the direction of the prevailing wind. Longshore drift moves sand along the beach and creates spits and **bars / bays / inlets**. If the prevailing wind changes direction, so does the direction of longshore drift.
6. The formation of sand dunes cannot occur unless there is plenty of sand in the swash to allow the dunes to grow. **State** whether you agree or disagree. Use the information in **FIGURE 6** to **justify** your response.

ANALYSE AND APPLY

7. If it were a windy day, **identify** where on the beach or dune would be the best place to take shelter. **Explain** your answer.
8. **Identify** the construction materials that might be deposited on a beach and the potential sources of this material.

EVALUATE AND COMMUNICATE

9. **Suggest** what might be some of the impacts on Cape Peron if a marina was constructed in the areas marked 'sandy beaches' in **FIGURE 8**.
10. **Describe** how coastal landforms are the result of the interconnection between the sea and the atmosphere.

Answers and sample responses for this topic are available online.

LESSON 9.4 Rivers shaping landscapes

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the different phases of a river
- **describe** the landform features that form from a river's source to its mouth.

Tune in

Major cities are built near rivers, such as the Swan River in Perth.

1. **Using the evidence provided in FIGURE 1, create a mind map of ways the people of Perth might use the Swan River.**
2. **Consider different groups within the population.**
3. **Share your list with the class.**

FIGURE 1 The Swan River winds its way through the city of Perth, shaping much of the city's layout and adding to its charm.



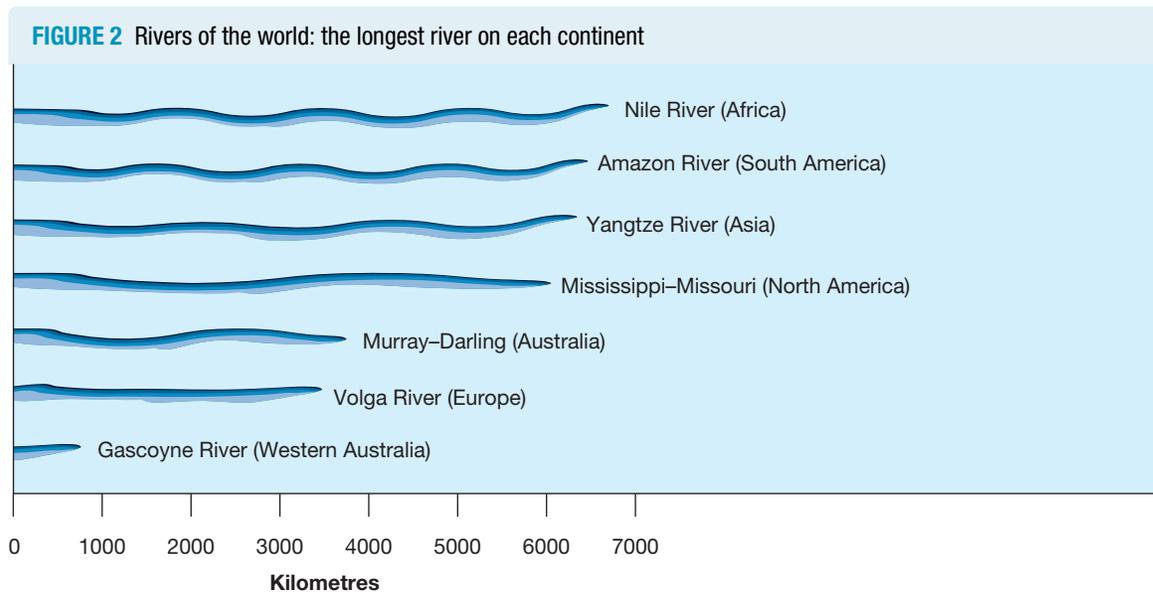
9.4.1 Moving water

Erosion, transportation and deposition are the key processes rivers use to sculpt landscapes. **Perennial** rivers, such as the Fortesque River in Western Australia's Pilbara region, flow all year.

Others, such as Gascoyne River in Western Australia, are **intermittent** and have seasonal flows.

Water is constantly moving through the water cycle; it evaporates from the surface and returns in the form of rain. It flows across the surface of the Earth into streams, eventually flowing into water bodies or soaking through rocks and soil into **groundwater**.

Groundwater is essential for keeping rivers flowing in dry months and preventing them from running dry.



SkillBuilder discussion

Questioning and researching

1. Look at **FIGURE 2**. How does each of these rivers compare to the Swan River that runs through Perth?
2. What is your 'local' or closest river? Where does it start and end? How long is it?

9.4.2 River systems and features

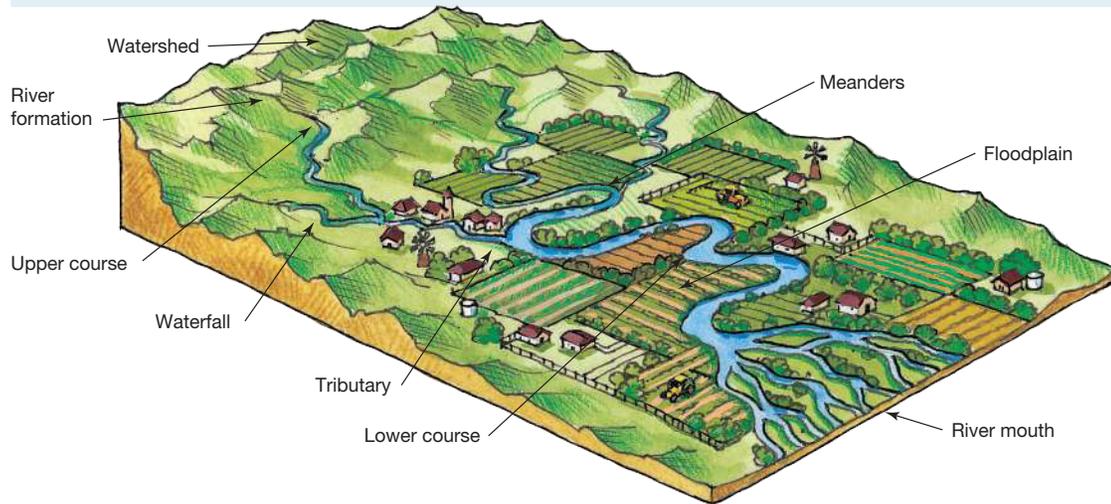
All parts of the Earth are related to the formation of river landscapes:

- The **lithosphere** (rocks and soil)
- The hydrosphere (water)
- The biosphere (plants and animals)
- The atmosphere (temperature and the water cycle)

Changes to a river can happen quickly or gradually. Any change can impact other locations along its course.

Rivers flow downhill; the source (start) will be at a higher altitude than its mouth (end). A fast-flowing flooded river will erode and transport large amounts of material **downstream**. As water speed or volume decreases, much of this material will be deposited. Rivers have three main sections — the upper, middle and lower course. Different processes and landforms are associated with each section (**FIGURE 3**).

FIGURE 3 A river system



SkillBuilder discussion

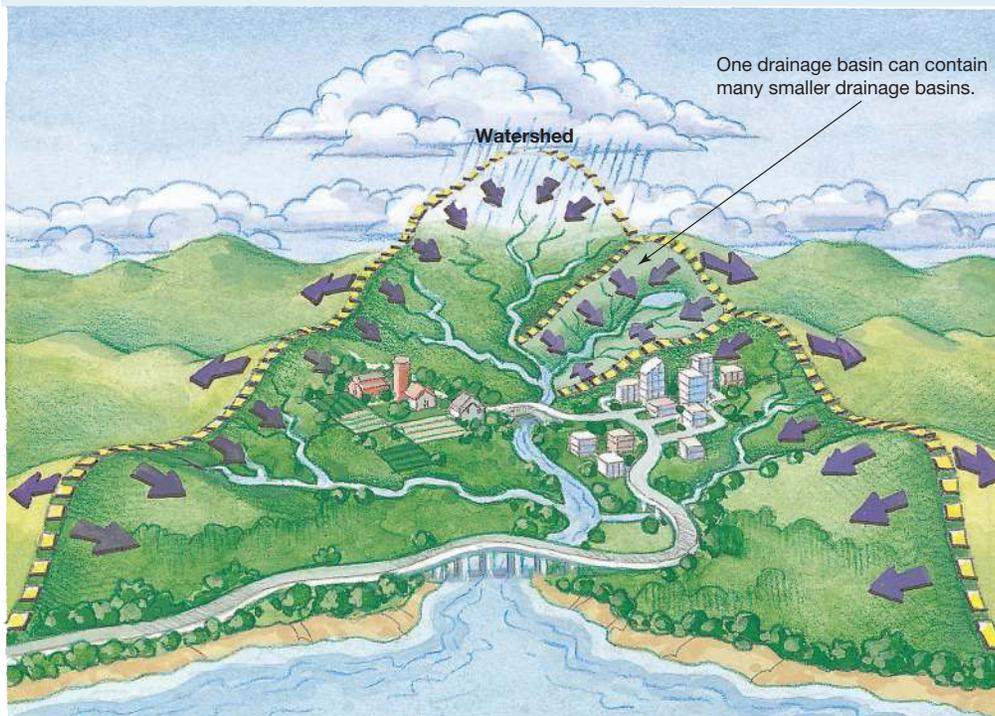
Questioning and researching

1. Why do you think waterfalls develop close to the source of a river?
2. Why do you think meanders have developed in the middle section of the river?
3. Why does the river split into several smaller channels as it reaches the sea?

Upper course

A river's water comes from within its **drainage basin** or catchment (see **FIGURE 4**). Its boundary is identified by higher land such as mountains and hills. This boundary is referred to as the **watershed**, and it determines the direction of river flow.

FIGURE 4 The watershed and catchment (drainage basin) of a river system



Within a drainage basin, water gathers in rills (depressions), which merge into streams (tributaries) and eventually form the main river. In the upper course, water flows rapidly from higher to lower elevations, increasing its erosive power.

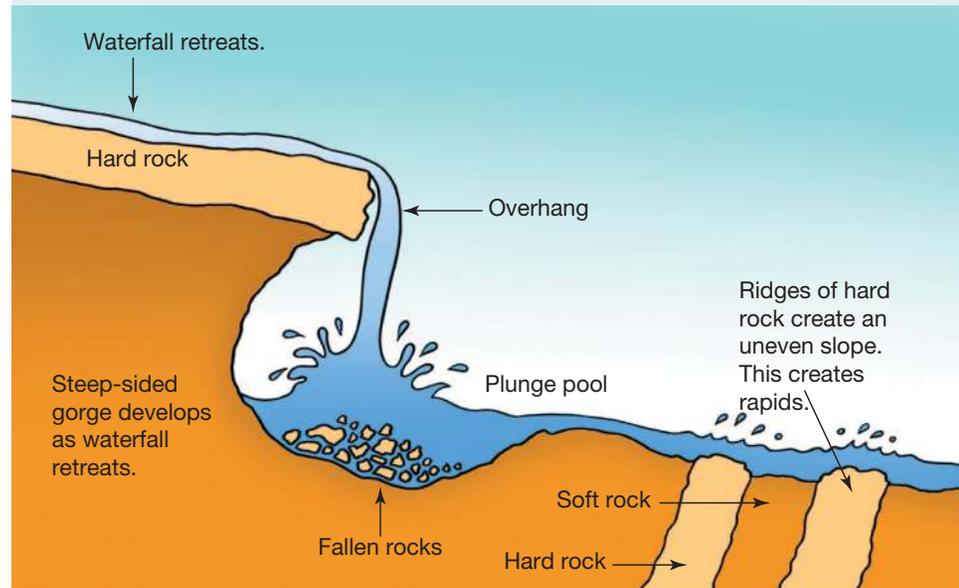
Common features in the upper course include waterfalls, plunge pools and rapids.

SkillBuilder discussion

Analysing

1. What are a waterfall and a plunge pool?
2. Why do you think they develop in the upper course of a river?
3. Would it be safe to swim in this area? Discuss.

FIGURE 5 A waterfall



Middle course

Rivers follow the topography of the surrounding area. As the land flattens, the river forms long sweeping turns called **meanders**. The river's energy slows as it carves a new path through the landscape. Over time, a meandering river will change its path, creating new bends and cutting off others. This can form an **oxbow lake**, referred to as a **billabong** in Australia.

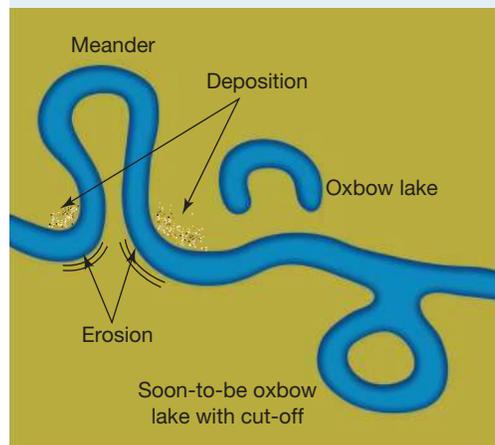
During heavy rainfall, rivers may overflow, flooding the surrounding area or **floodplain**. As the waters recede, they deposit nutrient-rich **sediment** (alluvium) from the upper course, enhancing soil fertility, which is commonly used for agriculture.

SkillBuilder discussion

Communicating and reflecting

1. Why do you think a river slows in the middle course?
2. Why do you think the river changes its course and creates oxbow lakes?
3. Suggest a reason the middle course of a river is ideal for agriculture.

FIGURE 6 The formation of a meander and oxbow lake



Lower course

As a river enters the lower course, it slows down, splitting into smaller streams called distributaries. Any remaining sediment it is carrying is deposited in an area referred to as the delta. **River deltas** are commonly fan shaped, arrow shaped and bird-foot shaped. A delta's shape is influenced by tides, waves and the volume of sediment and water carried by the river. Some rivers end with a wide mouth where fresh water mixes with salt water. This is known as an **estuary**.

Did you know?

Australia has no major river deltas because of the strong ocean currents surrounding the continent.

9.4 SkillBuilder activity

QUESTIONING AND RESEARCHING

1. Carry out some research to find out why the Ord River delta is important and create a fact sheet.
2. Other important river deltas in Australia include:
 - **Mitchell River delta** in Queensland, located in the Gulf of Carpentaria
 - **Murray River delta**, where the Murray meets the Southern Ocean in South Australia
 - **Daly River delta** in the Northern Territory, which flows into the Timor Sea
 - **Fitzroy River delta** in Queensland, located near Rockhampton and flowing into Keppel Bay
 - **Burdekin River delta** in Queensland, which meets the Coral Sea.
3. **Investigate** one of the deltas above and find out why it is important and create a fact sheet.
4. **Compare** the Ord River delta with the one you chose to research. Select an appropriate method of demonstrating how the two deltas are similar and how they differ.
5. **Compare** your findings with other members of your class.

FIGURE 7 The Ord River delta flows into the Cambridge Gulf.



9.4 Exercise

learnon

Learning pathways

LEVEL 1

2, 3, 4, 6

LEVEL 2

1, 5, 7

LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

1. Identify the correct statement.
 - a. The Nile River is 1.8 times longer than the Murray–Darling River.
 - b. The Murray–Darling River is 1.8 times longer than the Nile River.
 - c. The Nile River is 2.3 times longer than the Murray–Darling River.
 - d. The Murray–Darling River is 2.3 times longer than the Nile River.

2. Refer to **FIGURE 5**. Select the feature, other than water, that has to be present for waterfalls and rapids to develop.
 - a. Winds
 - b. Soft rocks
 - c. Bands of hard rock
 - d. Heavy rainfall
3. Why do people settle and farm on floodplains? Select all correct answers.
 - a. The land is flat.
 - b. The land is steep.
 - c. Regular flooding improves soil fertility.
 - d. It is easy to sandbag during times of high river flow.
 - e. A river is a source of water.
4. **Explain** how rivers are part of the water cycle.
5. Refer to **FIGURE 2** and **compare** the scale of Australia's longest river with the world's longest river.

ANALYSE AND APPLY

6. **Identify** a river that flows through the capital city in one state or territory in Australia. **Describe** its source, any tributaries, and its mouth.

EVALUATE AND COMMUNICATE

7. **Propose** what you think will happen to deltas if sea levels rise.
8. **Predict** the changes that will occur to the waterfall in **FIGURE 5**. **Justify** your answer.
9. **Discuss** what changes will occur along a river if there is unusually high rainfall in its upper course. Think in terms of erosion and deposition.
10. **Explain** whether governments should stop people from living on floodplains. **Justify** your response.

Answers and sample responses for this topic are available online.

LESSON 9.5 Australian landforms

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the key features of the Australian landscape
- **describe** the processes that have shaped the Australian landscape.

Tune in

Many of Queensland's mountain peaks were formed by volcanic activity around 20 million years ago. The Glass House Mountains, north of Brisbane, are volcanic plugs. Over millions of years, the volcano that surrounded the plugs has been worn away by weathering and erosion.

1. **What do you think led to the formation of the volcanic plugs?**
2. **Distinguish between weathering and erosion.**
3. **Why do you think weathering and erosion wore away the volcano but not the plugs?**

FIGURE 1 The Glass House Mountains, Queensland



Did you know?

Australia once had volcanoes and is an ancient landmass, dating back about 4300 million years. The Earth itself is about 4600 million years old.

9.5.1 What processes have shaped Australia?

Australia's landscapes have been shaped by natural forces like folding, faulting, volcanic activity, weathering and erosion over millions of years. These processes created features such as mountains, valleys and coastal areas. Since Australia sits in the middle of a **tectonic plate**, it doesn't have active volcanoes or much tectonic movement, which is why its mountains are worn down. Around 33 million years ago, Australia moved over a **hotspot**, causing eruptions that contributed to parts of the Great Dividing Range. Volcanic activity in this region ranges from the oldest at Cape Hillsborough, created 35 million years ago, to the most recent at Macedon Ranges, created 6 million years ago. At present, the hotspot that caused the earlier eruptions is probably beneath Bass Strait.

FIGURE 2 Relief map of Australia. The Great Dividing Range stretches from north of Cairns in Queensland to Mount Dandenong near Melbourne in the south. The Kimberley region and Hamersley Range are located in the west.



Source: ©WorldSat International, 2017

SkillBuilder discussion

Analysing

1. Study **FIGURE 2**. Why do you think the mountain ranges in Western Australia are older than those on the east coast?
2. Suggest a reason for mountain ranges being located close to the coast rather than inland.

In Western Australia, the Kimberley region is 1.8 billion years old and made up of ancient sandstone and volcanic rock. The Hamersley Range, which is even older at 2.5 billion years, is made of iron-rich rocks that were exposed over time through natural forces like tectonic movement and erosion.

Rivers and streams have further eroded the land, carving valleys in Australia's higher regions. Slowing streams, glaciers and winds have dropped the materials they carried (deposition), leading to the formation of broad coastal and low-lying inland valleys called flood plains.

9.5.2 Australia's landform regions

Coastal Lowlands

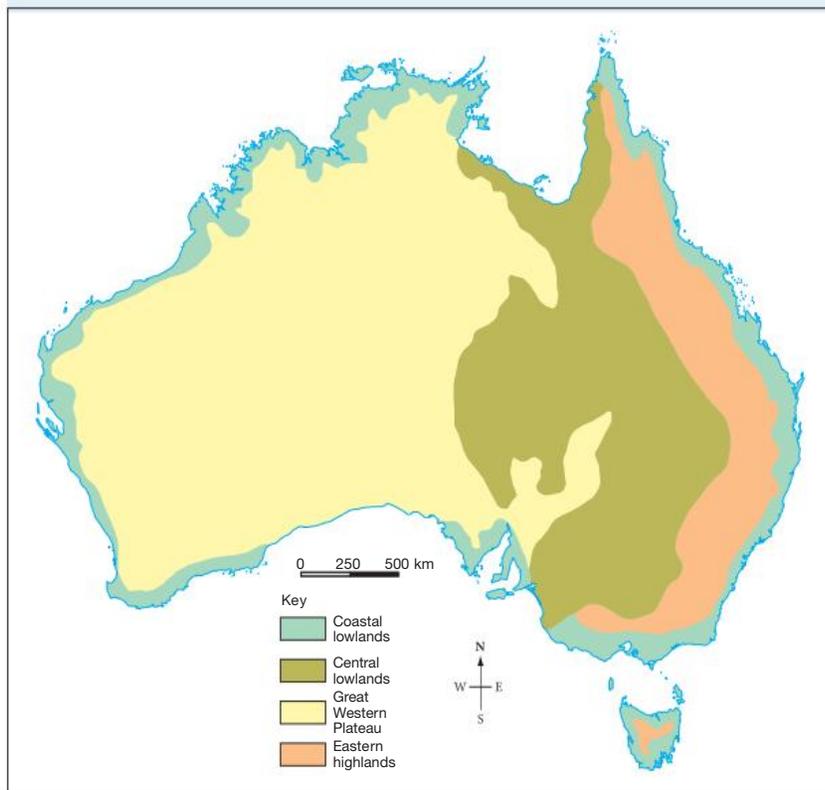
The Coastal Lowlands around Australia's edge are narrow and fragmented. The plains often take the form of river valleys, such as the Hunter Valley in NSW, and include significant wetlands and estuaries.

SkillBuilder discussion

Communicating and reflecting

1. Look at **FIGURE 3**. Describe what is meant by the term *landform region*.
2. What factors do you think are used to categorise landform regions?
3. Describe the area covered by each landform region.

FIGURE 3 Australia's four major landform regions



Source: MAPgraphics Pty Ltd Brisbane

CASE STUDY

Ningaloo Reef

Western Australia is home to diverse landscapes, ranging from arid deserts to coastal heathlands. Among its remarkable features is Ningaloo Reef, the world's longest fringing reef, located along the Cape Range Peninsula in the Exmouth region. Situated just a kilometre from the coast, this vibrant coral ecosystem hosts a spectacular array of marine life. In 2011, UNESCO designated Ningaloo Reef as a World Heritage site for its outstanding natural beauty and critical habitats supporting diverse and threatened species.

FIGURE 4 Ningaloo Reef extends for 260 kilometres along Western Australia's coastline.



FIGURE 5 Ningaloo Reef is home to many iconic species of marine wildlife, including the loggerhead sea turtle.

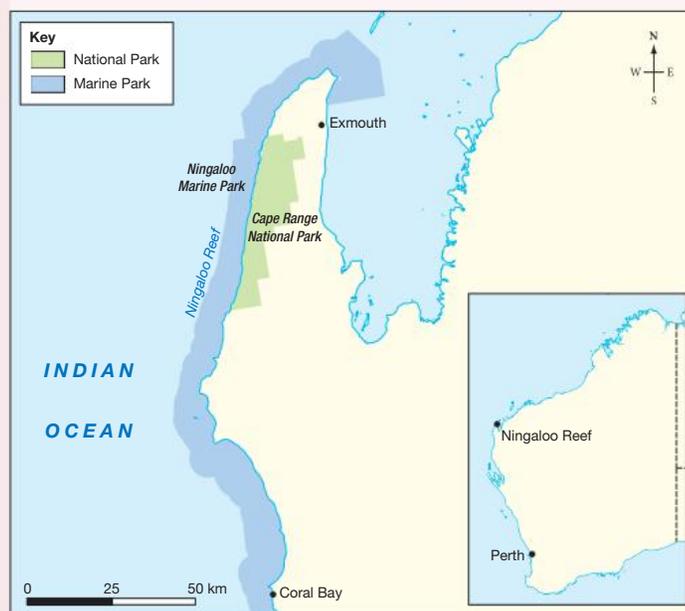


Coral reefs need clean, clear, shallow water (less than 30 metres depth) and temperatures of 18–40 °C, with optimal growth at 23–29 °C.

Ningaloo Reef thrives due to unique conditions:

- There are 320 days of sunshine annually.
- The Exmouth region receives very little rainfall (230 mm/year), reducing run-off and ensuring clear waters.
- There is low coastal development, resulting in minimal pollution.
- There is a convergence of ocean currents — Ningaloo Current (warm water from the north) and Leeuwin Current (cold, oxygen-rich water from the south) — fostering exceptional biodiversity with diverse corals and marine species.

FIGURE 6 Location of Ningaloo Reef in Western Australia



Source: Geoscience Australia

Eastern Highlands

The Eastern Highlands, including the Great Dividing Range, feature tablelands, **plateaus** and rugged valleys carved by rivers like the Fitzroy, Darling and Murray. The southeast's alpine region, snowy most of the year, contains peaks such as Mount Kosciuszko in the Australian Alps and Snowy Mountains.

Central Lowlands

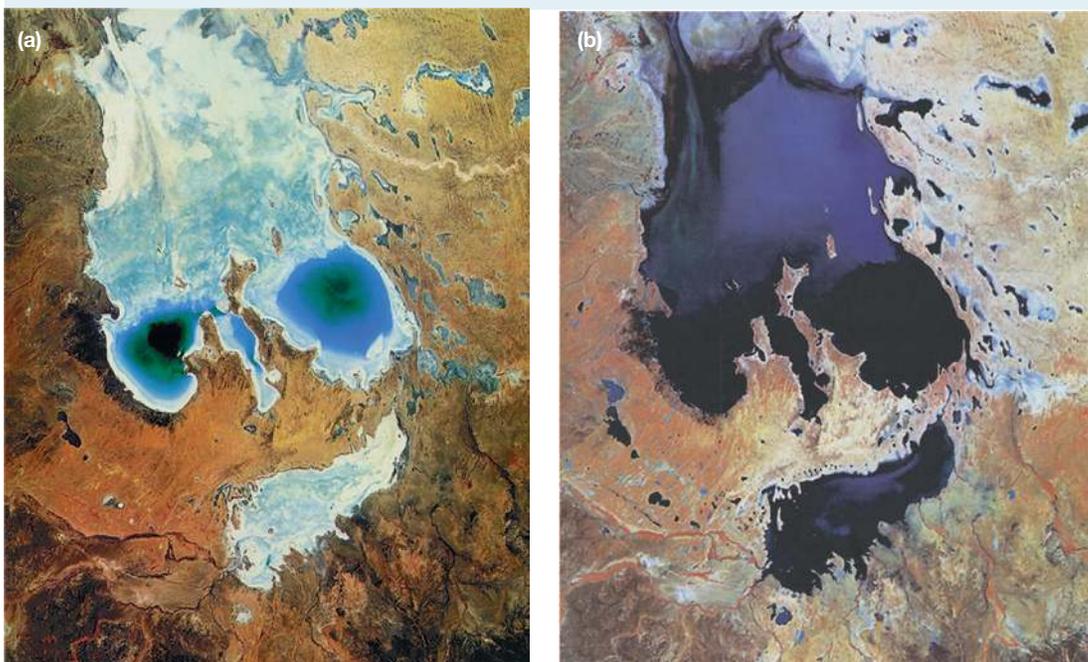
The Central Lowlands are a vast, very flat, low-lying land that contains three large drainage basins: the Carpentaria lowlands in the north, the Lake Eyre Basin in the centre (see **FIGURE 7**) and the Murray–Darling Basin in the south. The Great Artesian Basin, one of the largest and deepest underground freshwater reserves, is also in this region.

Great Western Plateau

The Great Western Plateau covers significant parts of Western Australia, South Australia and the Northern Territory. It is a huge area of tablelands, which are mostly 500 metres above sea level. It includes areas of gibber (stony) desert and sandy desert. There are several rugged upland areas, including the Kimberley region and MacDonnell Ranges.



FIGURE 7 Kati Thanda–Lake Eyre, the lowest point on the Australian mainland, is part of the Great Artesian Basin. It is 15 metres below sea level. Once a freshwater lake, the region is now the world's largest salt pan. The evaporated salt crust shows white in the satellite image **(a)** shown. The lake fills with water only three or four times each century, transforming it into a haven for wildlife. Deep water is shown as black in image **(b)**.



SkillBuilder discussion

Analysing

1. Look at **FIGURE 7**. Where is Kati Thanda–Lake Eyre located?
2. Explain why it only fills with water every three or four times each century.
3. Describe how this place changes from image (a) to image (b).

9.5.3 How does water flow across the land?

Permanent rivers and streams flow in only a small proportion of the Australian continent. Australia is the driest inhabited continent. It has:

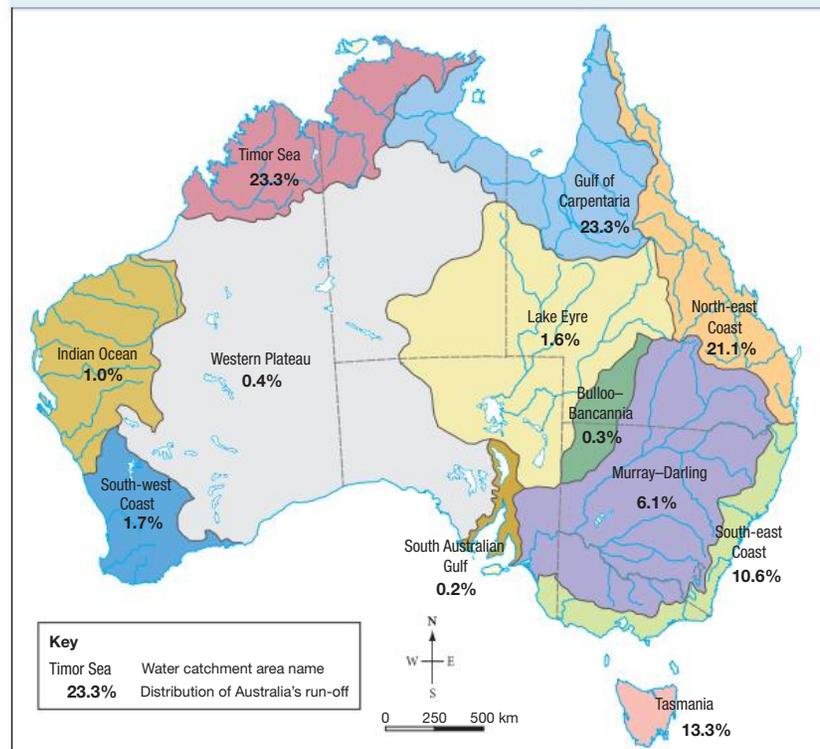
- the lowest amount of run-off
- the lowest percentage of rainfall as run-off
- the least amount of water in rivers
- the smallest area of permanent wetlands
- the most variable rainfall and stream flow.

FIGURE 8 Lake Argyle



Australia has many lakes and drainage basins (see FIGURE 9), but many hold little water compared with those found on other continents. The largest drainage basins are in the tropical north, far from major population centres. The Ord River Scheme near Kununurra in Western Australia was designed to harness water that flowed into the Timor Sea. The Ord River dam can hold up to 5641 gigalitres of water, the equivalent of 11.2 Sydney Harbours. The water is used to irrigate crops, transforming land once only suitable for cattle ranches into economically viable land for crops. However, the scheme is controversial. Critics argue it is a waste of money and an environmental disaster. Others view the scheme as a potential bread basket for Western Australia, providing thousands of jobs and export earnings.

FIGURE 9 Australia's drainage basins



Source: MAPgraphics Pty Ltd Brisbane

9.5 SkillBuilder activity

QUESTIONING AND RESEARCHING, COMMUNICATING

AND REFLECTING

Divide your class into five groups and assign groups 1 to 4 one of Australia's landform regions to investigate. Collectively **compile** a list of landforms that are found in each region, have each member of the group **investigate** a different landform and prepare a series of slides that show the following:

- a. the landform
- b. where it is located
- c. how it was formed
- d. its importance to Aboriginal and Torres Strait Islander Peoples
- e. reasons why it is or is not a popular place that people want to visit.

Group 5 should use their atlas to **locate** the highest mountains in each Australian state and territory.

- f. **State** the height of this mountain.
- g. **Identify** where it is located.
- h. **Explain** how it has changed over time.
- i. **Discuss** its importance to Aboriginal and Torres Strait Islander Peoples — **outline** the creation story that explains its formation.

Groups should work collaboratively online using Google Slides or a similar program to put their presentation together for viewing by the rest of the class.

9.5 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 4, 6

■ LEVEL 2

2, 3, 8

■ LEVEL 3

5, 7, 9, 10

REMEMBER AND UNDERSTAND

1. **Explain** what conditions need to exist for a coral reef to form.
2. Complete the following passage using the words below.

faulting	uplift	tectonic	crust	surface
----------	--------	----------	-------	---------

Folding, faulting and uplift are processes that occur as a result of _____ activity. Pressures deep within the Earth's _____ cause the rocks that make up its _____ to buckle and fold, in much the same way that an aluminium can does when squeezed. Sometimes breaks occur or fractures develop, known as _____, and blocks or sections of the crust are pushed upwards, known as _____.

3. True or false? Australia is so low in altitude and flat compared with other continents because the continent is located in the middle of a tectonic plate, has no active volcanoes and very little tectonic uplift from below.
4. **Describe** some of the physical changes Australia's landmass has undergone.
5. **Describe** the major characteristics of Australia's four main landform regions.

ANALYSE AND APPLY

6. Use your atlas to find the Cape Hillsborough and Macedon volcanoes, or refer to **FIGURE 2**.
 - a. Calculate the distance between them.
 - b. Use the information in this lesson to work out the rate at which the Australian landmass is moving.
 - c. **State** how far Australia has moved over the Bass Strait hotspot. Calculate where under Bass Strait this hotspot might be now.
 - d. Use the information in this lesson to **explain** why this hotspot has changed its location over time.
7. It is said that the amount of water that flows down the Amazon River in a day is more than the amount that flows down the Murray River in a year.
 - a. **Propose** what this tells us about how dry Australia's climate is.
 - b. **Describe** how this might affect the environment around the Murray River.
8. **Describe** the role of the Bass Strait hotspot in creating the landforms on Australia's east coast.
9. **Describe** how Kati Thanda–Lake Eyre has changed over time. **Identify** a reason for these changes.

EVALUATE AND COMMUNICATE

10. **Explain** why Ningaloo Reef might be limited in its expansion south. **Suggest** whether this could change in the future. **Discuss**.

Answers and sample responses for this topic are available online.

LESSON 9.6 Rainforests, grasslands and deserts

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the characteristics of rainforests and describe their distribution
- **explain** the characteristics of grasslands and describe their distribution
- **explain** the characteristics of deserts and describe their distribution.

Tune in

Aboriginal and Torres Strait Islander communities use fire sticks to light fires, referred to as 'cool burns' as a method of land management in grassland ecosystems. Only small areas are burnt, and careful attention is paid to the condition of the grass, temperature and winds. Fires are low and lit in the early morning or late afternoon when it is cooler to help prevent them from getting out of control. The dry undergrowth is burnt, reducing fuel load. The practice helps encourage new growth and maintains the grassland.

FIGURE 1 A cool burn



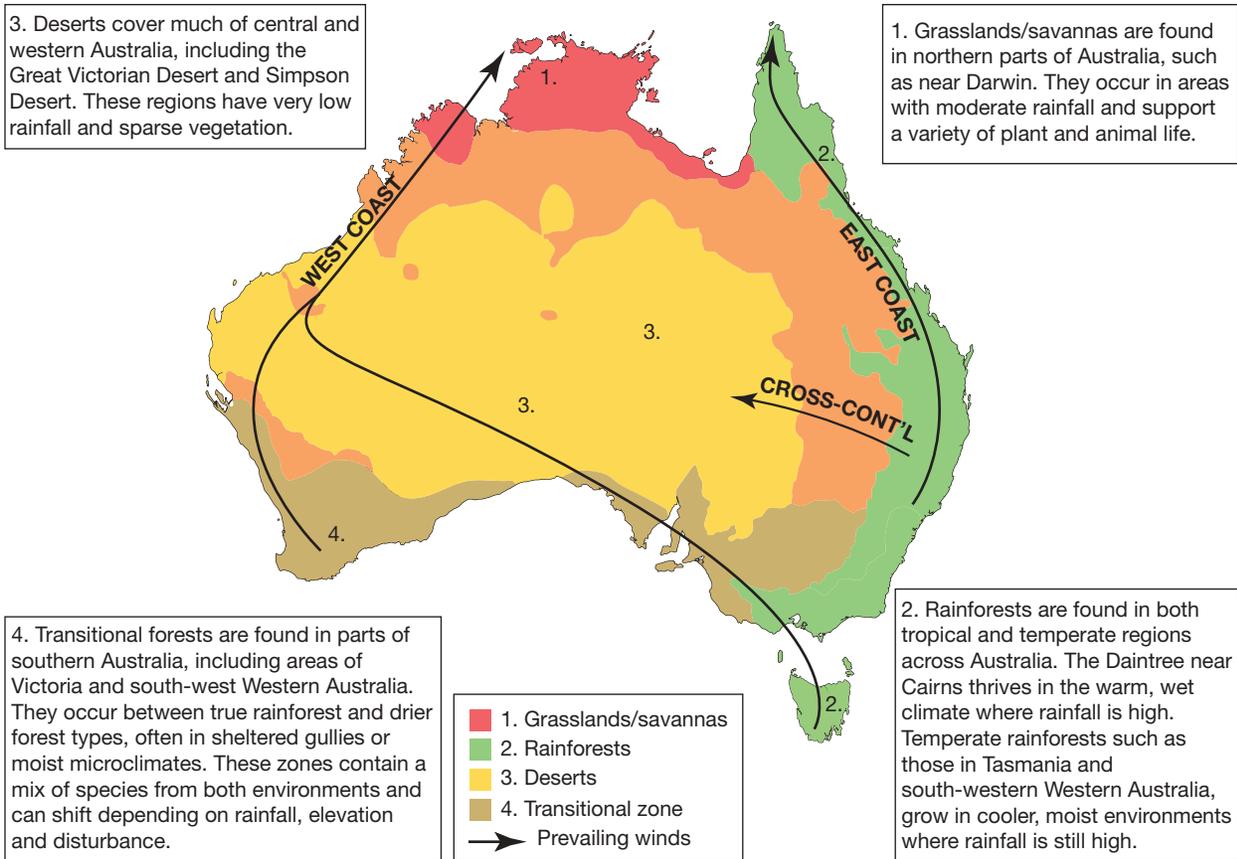
1. Discuss with a partner the benefits of landscape burning.
2. It has been suggested that more selective burning of bushland should take place during winter to reduce the threat of bushfires in summer. Brainstorm a list of advantages and disadvantages of this suggestion.

9.6.1 Australia's distinctive landscapes

Rainfall decreases as you move inland, resulting in the formation of deserts. In northern regions, areas with heavier rainfall and a warmer climate support the growth of grasslands and tropical rainforests. In the temperate south, high rainfall provides ideal conditions for temperate rainforests to thrive.

Transitional zones refer to areas where one type of landscape or ecosystem gradually shifts into another.

FIGURE 2 Distribution of rainforests, deserts and grasslands in Australia



SkillBuilder discussion

Analysing

1. Look at **FIGURE 2**. Describe the distribution of rainforests, grasslands and deserts.
2. How do you think prevailing winds affect the development of different landscapes?

Did you know?

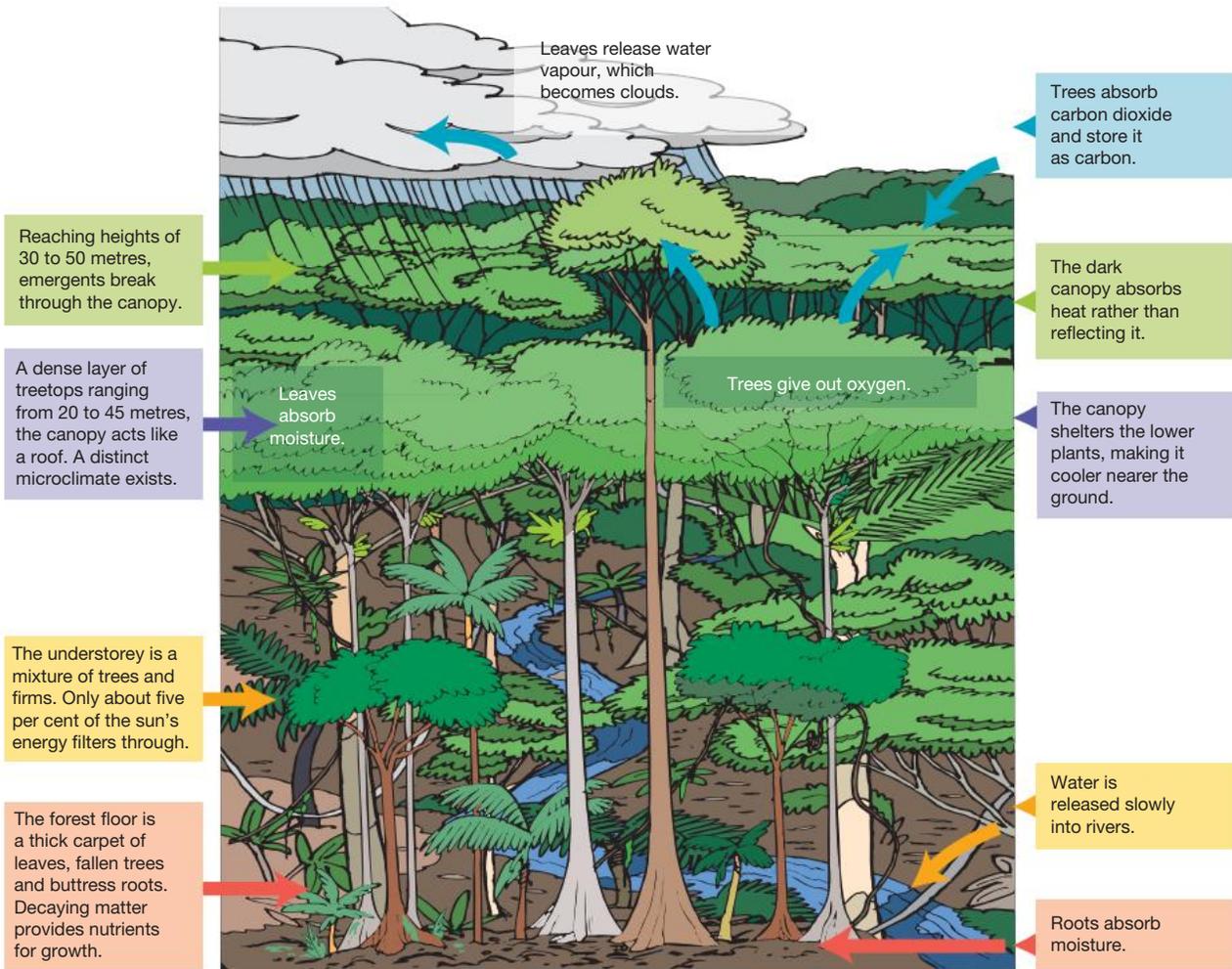
Did you know that rainforests have been described as the Earth's lungs and are important carbon sinks? They take in carbon dioxide and store it in the leaves, branches and trunks of their trees. A by-product of photosynthesis is the production of the oxygen that we breathe.

9.6.2 Australian rainforests

Rainforests are unique ecosystems consisting of four different layers, each with distinct characteristics.

Across Australia, Aboriginal and Torres Strait Islander Peoples such as the Noongar in south-western Western Australia have a deep connection to the rainforest. Their knowledge and traditions are an integral part of the sustainable management and preservation of the environment.

FIGURE 3 Layers in the tropical rainforest. The rainforest plays a vital role in controlling the world's climate and oxygen supply. Scientists believe that half of the Earth's oxygen is produced by the Amazon rainforest.



Did you know?

More than 7000 modern medicines come from rainforest plants, addressing issues from headaches to malaria. A quarter of cancer-fighting drugs and those used to treat heart disease, arthritis and asthma are also sourced from rainforests.

Additionally many of the foods we eat and timbers we use originate in the rainforest.

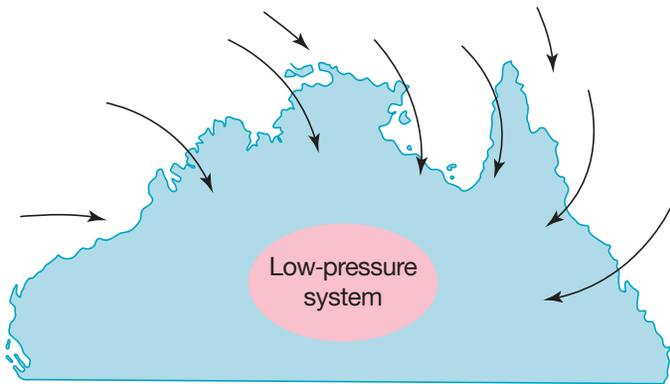
9.6.3 Australian grasslands

Grasslands, including temperate and tropical savannas, are transitional zones between rainforests and deserts. They receive more rainfall than deserts but not enough to support the dense vegetation of rainforests.

Characterised by continuous grass cover, scattered flat-topped trees (often shrub-like) and gallery forests along rivers, grasslands are maintained through grazing animals and fire management. Fire fosters new plant growth, prevents desertification and supports grazing ecosystems.

Australia's tropical grasslands, spanning from Broome to Townsville, experience hot year-round conditions, with wet summers and dry winters. The wet season corresponds with monsoons, shaping the environment and the lives of Aboriginal and Torres Strait Islander Peoples, who have sustainably managed these landscapes for thousands of years.

FIGURE 4 Australia's wet and dry seasons are the result of air movements and air pressure systems.

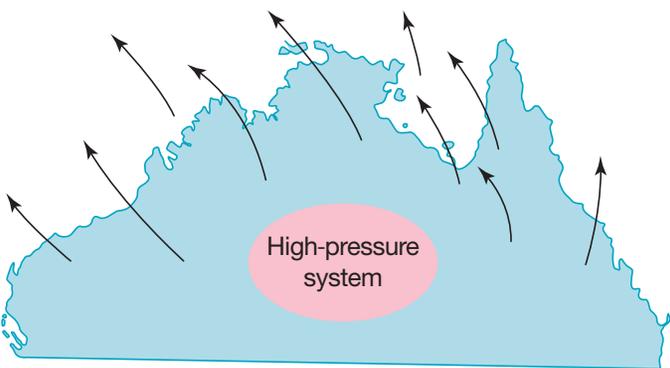


a. Summer months

→ Major wind direction

In summer

- The land heats up; the air is hot and light.
- Hot air rises and cools, creating a low-pressure system.
- Air moves in from over the ocean to replace the rising air.
- This air is wet and brings rain to northern Australia.



b. Winter months

→ Major wind direction

In winter

- The land cools down.
- The air is heavy and sinks, creating a high-pressure system.
- The air is dry as it has passed over the interior of the continent.
- Dry air moves to the north, bringing dry weather to northern Australia.

SkillBuilder discussion

Analysing

1. When is the monsoon season in northern Australia? Support your answer with evidence from the map.
2. What type of weather do you expect during the monsoon season?
3. When do you think cool burns would be used in this region? Justify your answer.

9.6.4 Australian deserts

After Antarctica, Australia is the driest continent in the world. Its deserts are generally flat and often vibrant in colour. Rain usually occurs as a few heavy storms that last a short time and can be so intense that normally dry rivers overflow their banks.

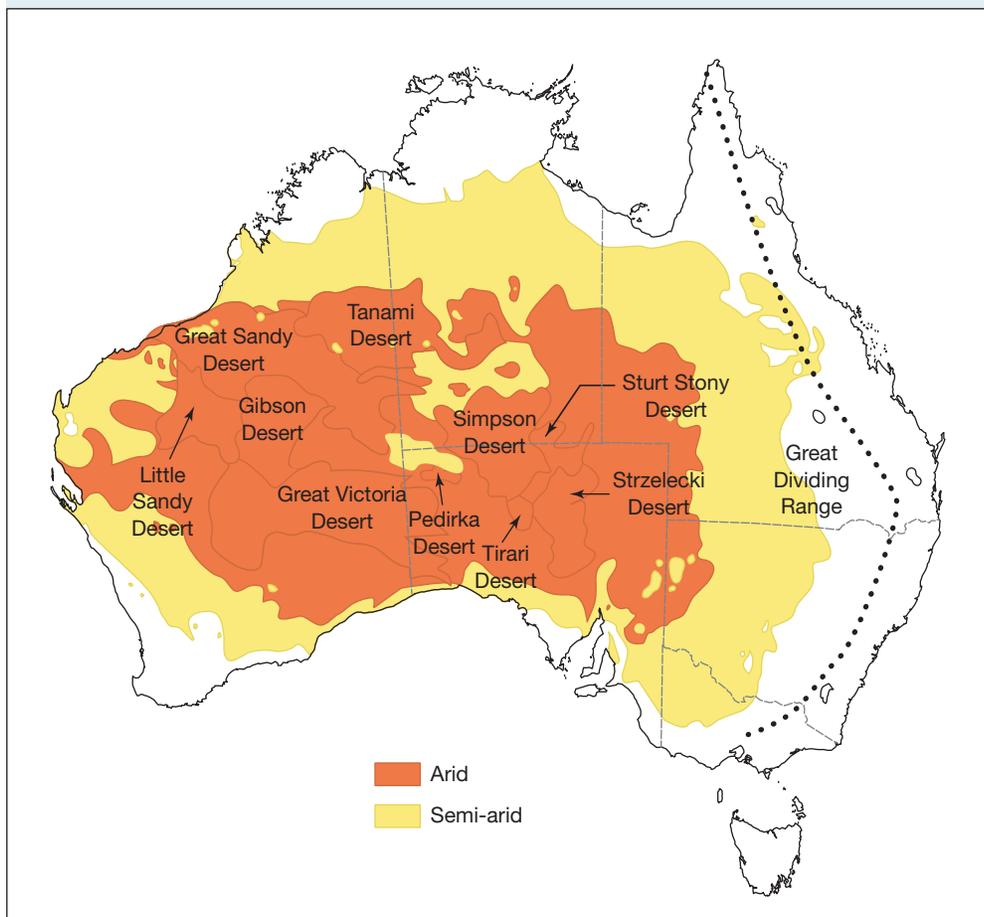
Around 70 per cent of the Australian landmass is classified as arid or semi-arid, but only 18 per cent is true desert.

TABLE 1 Rainfall levels in Australian deserts

Rainfall (mm) per year	Type of desert	Examples
25–200	arid	Simpson Desert and Great Sandy Desert
200–500	semi-arid	Gibson Desert and Great Victoria Desert

Although deserts can be hot or cold, Australia only has hot deserts. Located between the equator and the Tropic of Capricorn, they receive less than 250 mm of rainfall annually. In summer, temperatures can soar past 50 °C. Humidity levels are low, ranging between 10 and 20 per cent.

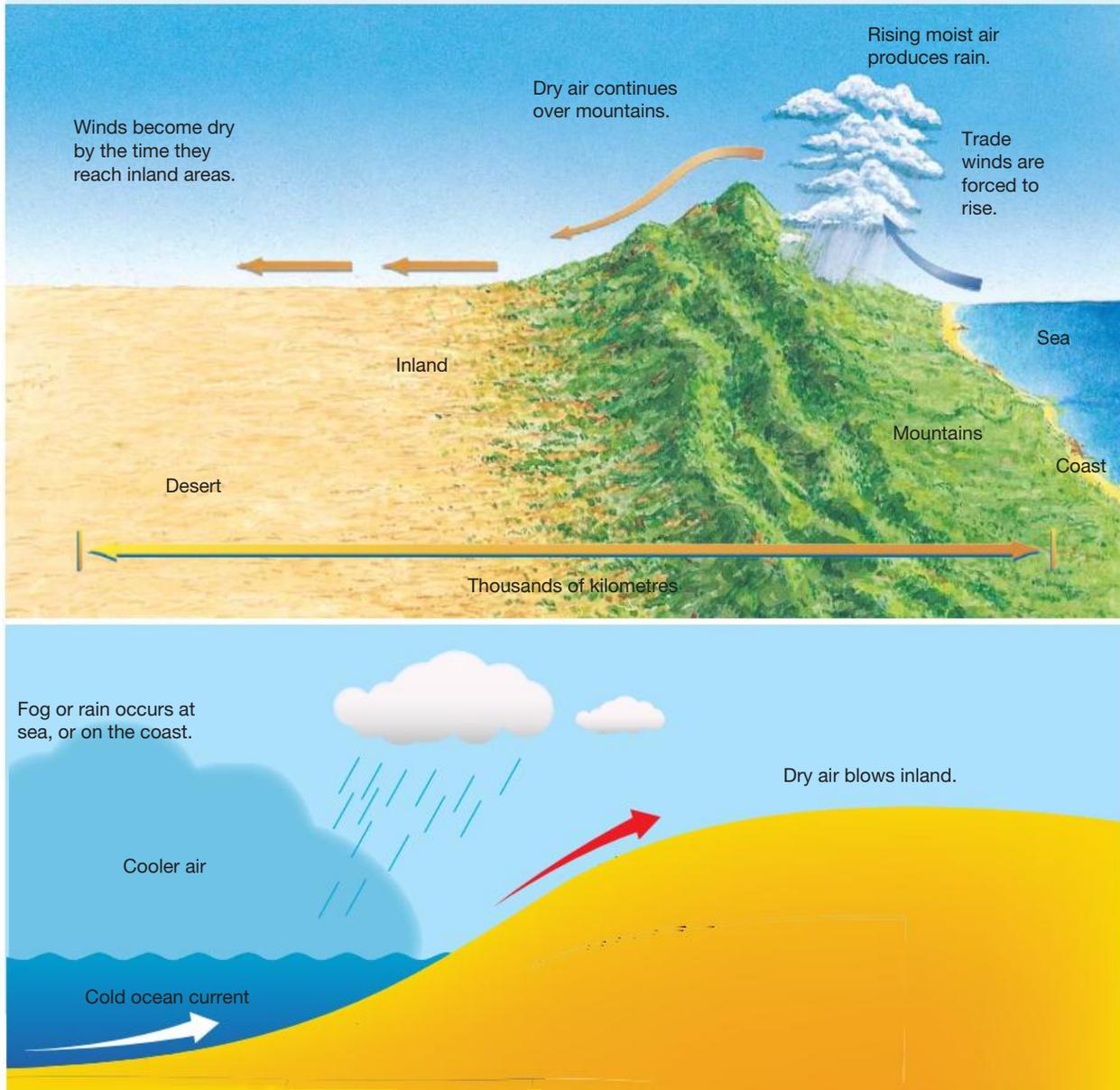
FIGURE 5 Australia's major desert regions



The Simpson Desert is an example of a rain-shadow desert. The Great Dividing Range blocks warm moisture-laden air from the east coast reaching the continent's interior.

The Little Sandy Desert is the result of the cold ocean currents along the west coast. Winds blowing across the land contain little moisture and are dry when they move inland.

FIGURE 6 Australian deserts are either rain-shadow deserts or coastal deserts.



SkillBuilder discussion

Communicating and reflecting

1. Look at **FIGURE 6**. What is the direction of the prevailing winds in each image?
2. What happens to the winds once they pass over the land?
3. Write two or three sentences to explain how each type of desert forms.

9.6.5 Desert landforms



FIGURE 7 A variety of landforms are found in deserts. They are shaped by wind and water. Examples of each can be found in Western Australia.

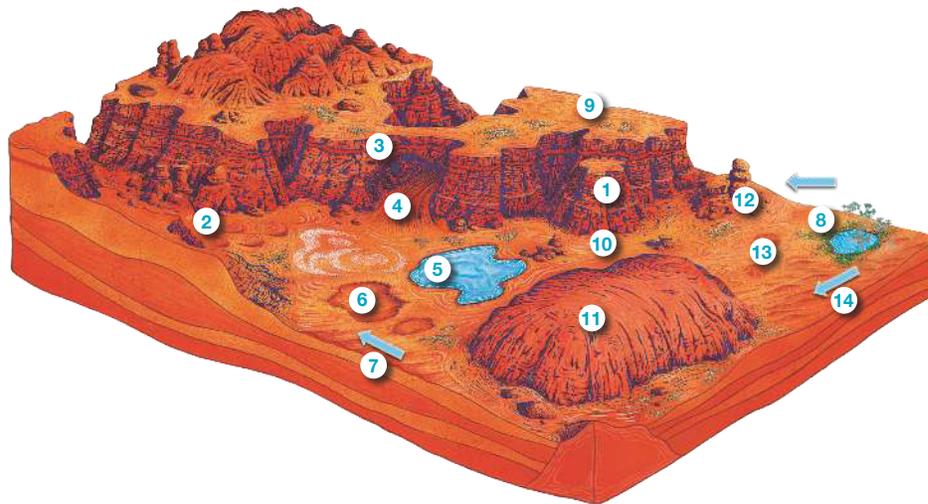


TABLE 2 Desert landforms

	Desert landform	Description	WA example(s)
1	Butte	Solid core of an eroded mesa, shaped like a castle/tower	Examples from the Pilbara region
2	Barchan dune	Crescent-shaped dune formed by light sand cover	Found in the Great Sandy Desert
3	Arch/window	Rock opening carved by erosion	Nature's Window, Kalbarri National Park
4	Alluvial fan	Semicircular material build-up at slope bases	Murchison River area
5	Playa lake	Shallow lake; evaporates, leaving salt pans	Lake Disappointment
6	Clay pans	Low-lying areas that remain wet/muddy	Found in the Gibson Desert
7	Transverse dune	Dune with ripples formed by consistent winds	Little Sandy Desert
8	Oasis	Fertile desert area fed by underground water	Canning Stock Route oasis
9	Mesa	Flat-topped, steep-sided plateau formed by erosion	Cockburn Range, Kimberley
10	Sand dune	Mound of sand shaped by wind	Pinnacles Desert, Nambung National Park
11	Inselberg	Solid rock that rises as softer land erodes	Mount Augustus
12	Chimney rock	Pillar-like remains of a butte	Found near Pilbara mesas
13	Star dune	Dune formed by winds from multiple directions	Found in the Great Sandy Desert
14	Longitudinal dune	Dune shaped by strong, one-directional winds	Great Victoria Desert

9.6 SkillBuilder activity QUESTIONING AND RESEARCHING

TABLE 3 shows some of the landform features found in Western Australia. Where possible, dual naming has been used.

Select one of these landscapes to investigate.

- Show the location of your landform on a map.
- Include an image that shows how your landform looks today.
 - Describe the processes that have created your landform.
- Explain how your landform was created:
 - Describe how it looked in the past.
 - Describe how it might look in the future.

TABLE 3 Western Australian landforms

Ecosystem	Landform	Description
Deserts	Mawurritjiyi/Great Sandy Desert dunes	Expansive sand dunes shaped by consistent desert winds
	Kumpupintil Lake/Lake Disappointment	A playa lake that evaporates to leave salt pans
	Purnululu/Bungle Bungles	Dome-shaped sandstone formations in Purnululu National Park
Rainforests	Burringurrah/Mount Augustus	World's largest monolith, a prominent inselberg in the arid interior
	Caldyanup/Mount Frankland	Granite peak offering views of the surrounding Walpole-Nornalup rainforest
	Nor-Nor-Nup/Valley of the Giants	Towering karri and tingle trees in a temperate rainforest
Grasslands	Murchison River Gorge	Rugged cliffs and valleys carved by the Murchison River
	Granite outcrops	Unique formations surrounded by grasslands — e.g. near Hyden

9.6 Exercise

learn on

Learning pathways

■ LEVEL 1
1, 2, 5

■ LEVEL 2
3, 4, 6, 7, 9

■ LEVEL 3
8, 10

REMEMBER AND UNDERSTAND

1. Identify the four layers in the rainforest:
 - a. Canopy, understorey, forest floor, sub-surface
 - b. Emergent, canopy, understorey, forest floor
 - c. Emergent, carbon, absorption, root zone
 - d. Tall trees, small trees, ferns, forest floor
2. A carbon sink stores carbon dioxide. Identify of the following landscapes would be considered a carbon sink.
 - a. Deserts
 - b. Grasslands
 - c. Rainforests
3. **Explain** the factors that have resulted in the formation of Australia's desert region.
4. **Explain** why rainforests are sometimes called the 'lungs of the Earth'.
5. **Identify** the major line of latitude on which Australian deserts are located.

ANALYSE AND APPLY

6. **Explain** why grasslands are described as a transitional landscape.
7. Answer the following questions.
 - a. **Identify** the name given to the tallest trees in the rainforest.
 - b. **Explain** why they were given this name.

8. Answer the following questions.
 - a. **Explain** why there are few trees in grasslands.
 - b. **Define** the term *gallery forest*.
 - c. **Propose** a reason why gallery forests are usually found along watercourses, even when the watercourse is dry.
9. **Explain** what is meant by the term *cool burn* and why these are not associated with bushfires.

EVALUATE AND COMMUNICATE

10. **Discuss** reasons that account for the rich source of well-preserved fossil remains in desert regions and the lack of similar finds in rainforest regions.

Answers and sample responses for this topic are available online.

LESSON 9.7 Underground landscapes

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how a karst landscape is formed.

Tune in

Did you know that the rocks that make up the karst landscape are composed of limestone and dolomite? Both are carbonate rocks (a subclass of sedimentary rocks). They are highly susceptible to a form of chemical weathering known as oxidation (a chemical reaction that causes rocks to break down due to the presence of water, oxygen or acid).

FIGURE 1 Lake Cave, Margaret River, Western Australia



1. How do you think sedimentary rocks were formed?
2. You can see oxidation at work when you cut an apple and it turns brown. What do you think is causing oxidation?
3. Brainstorm how you think the structures shown in FIGURE 1 were formed.

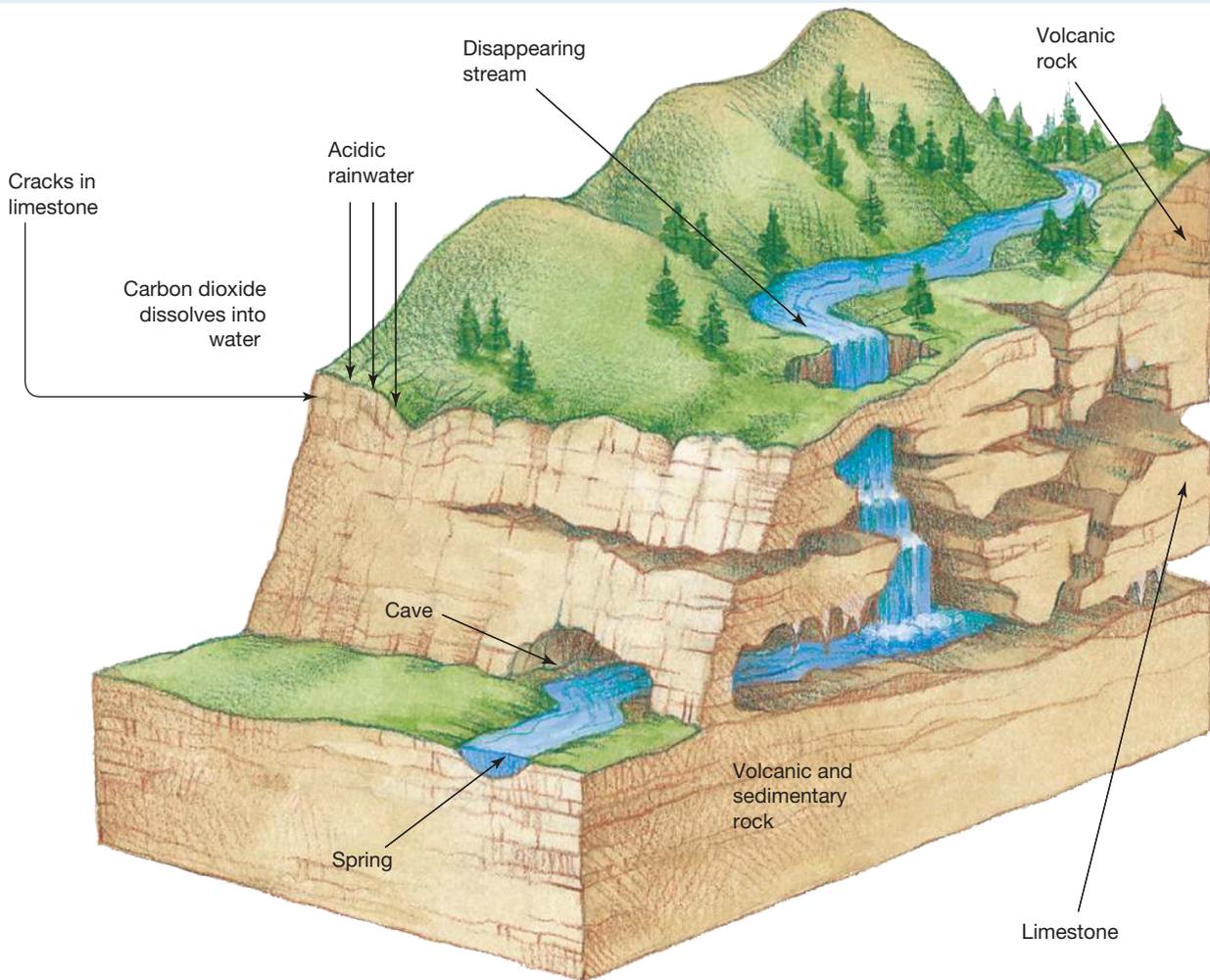
9.7.1 What is karst?

An underground network of rivers creates a network of cave and channels known as karst.

Karst landscapes form over hundreds of thousands of years as water dissolves bedrock (**FIGURE 1**). On the Earth's surface, sinkholes (holes), vertical shafts (tunnels) and fissures (cracks) will be evident. Rivers and streams seem to disappear, as they make their way into intricate drainage networks underground, complete with **stalactites** and **stalagmites** (**FIGURE 1**).



FIGURE 2 Formation of a karst landscape



SkillBuilder discussion

Analysing

1. Look at **FIGURE 2**. Explain why the stream seems to disappear.
2. What do you think causes acidic rainfall?
3. What type of rock erodes to form the karst landscape?
4. Do you think this rock would erode if the rainwater were not acidic?

Karst topography makes up 15 per cent of the Australian continent. Karst aquifers are a significant source of groundwater in parts of the Northern Territory and Western Australia.

9.7.2 How are karst landscapes formed?

Water becomes slightly acidic when it interacts with carbon dioxide in the atmosphere or filters through organic matter in the soil and **percolates** into the ground. Acidic water can dissolve **soluble** bedrock such as limestone and dolomite, creating cracks and fissures that allow more water to penetrate the rocks.

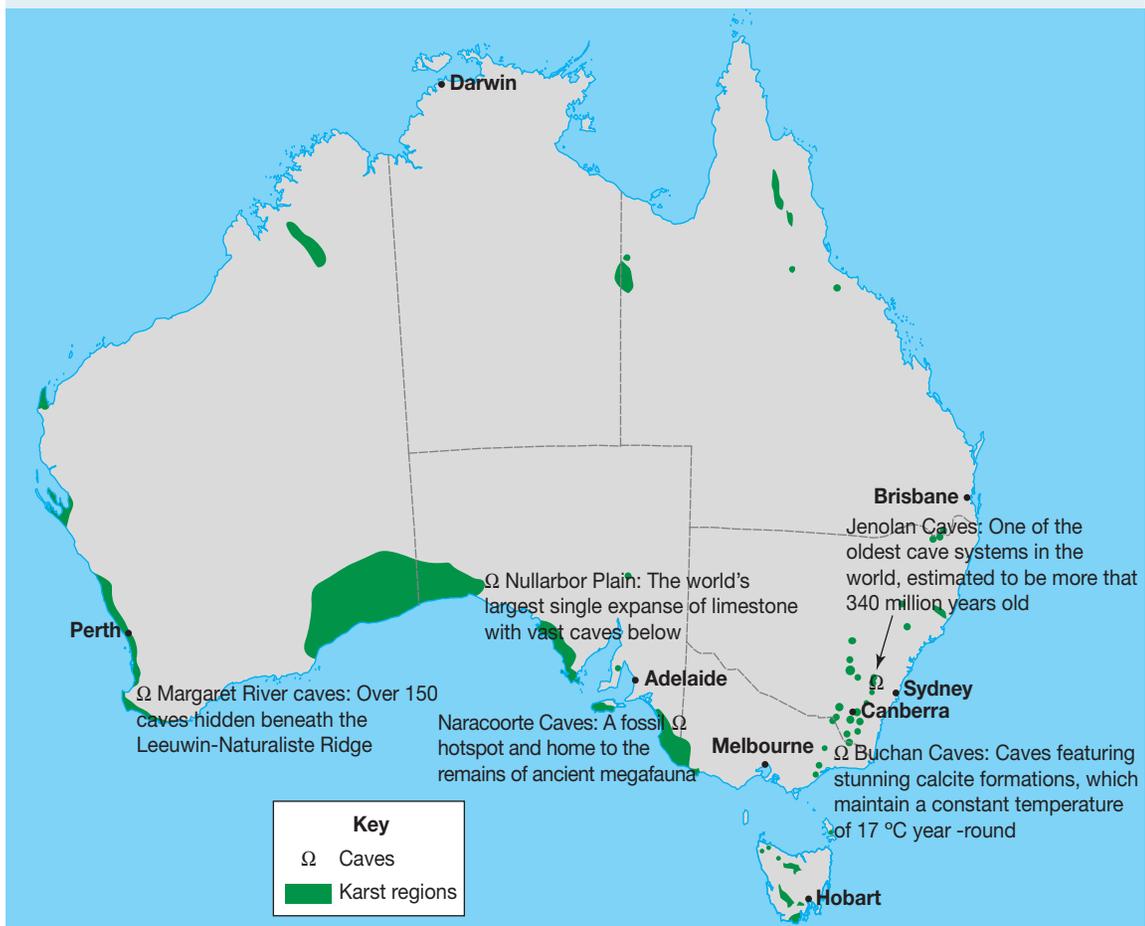
When water reaches a layer of non-dissolving rock, it erodes sideways, forming underground rivers or streams. Over time, water creates hollows that eventually develop into caves. Some karst landscapes contain aquifers capable of providing large amounts of water. Up to 25 per cent of the Earth's people rely on karst aquifers for their water supply.

9.7.3 Where are karst landscapes found?

As shown in **FIGURE 3**, karst landscapes are found around Australia.



FIGURE 3 Karst regions of Australia



SkillBuilder discussion

Questioning and researching

1. Look at **FIGURE 3**. Suggest a reason why most karst is found in coastal areas.
2. Discuss a list of features you might see in karst caves.

Did you know?

In some caves, the roots of trees and shrubs penetrate the cave and hang down from the roof. Near entrances with light and moisture, moss and algae thrive. The endangered ghost bats, along with blind fish and shrimp, are specially adapted to life in the dark.

Karst is found all over the world, mainly in tropical areas where high rainfall erodes soluble rock.

Oondiri/the Nullarbor Plain is home to the Earth's largest arid limestone karst cave system, spanning 270 000 square kilometres. It stretches 2000 kilometres from the Eyre Peninsula in South Australia to Norseman in Western Australia's Goldfields–Esperance region, and from the Bunda Cliffs on the Great Australian Bight in the south to the Victoria Desert in the north.

The extensive cave system provides a unique habitat for a variety of native flora and fauna. Within the caves are fossils that reveal much about our distant past; fossils of thylacines (Tasmanian tigers) have been found in the cave systems south of Perth. Additionally, these caves are important Aboriginal heritage sites.

9.7 SkillBuilder activity COMMUNICATING AND REFLECTING

Examples of karst landscapes in Australia include the caves Buchan, Naracoorte, Jenolan, Labertouche, Princess Margaret Rose, Judbarra and Abercrombie, and Oondiri/the Nullarbor Plain.

1. Working with a partner, **investigate** one of these environments and create an annotated visual display. Show the location of your karst environment on a map and include:

- the scale
- features, including flora and fauna
- land use
- any concerns or threats to the environment.

Include information on what is being done to ensure the sustainable management of the place and the significance of this place to Aboriginal and Torres Strait Islander Peoples.

2. **Outline** your findings to the rest of the class in a brief presentation.

9.7 Exercise

learn on

Learning pathways

LEVEL 1

1, 2, 6

LEVEL 2

4, 5, 8

LEVEL 3

3, 7, 9, 10

REMEMBER AND UNDERSTAND

1. Select how karst landscapes are formed.
 - a. Chemical reaction
 - b. Transportation
 - c. Uplift
 - d. All of the above
2. Karst topography makes up about _____ per cent of the Australian continent.
3. Select two reasons why karst landscapes should be preserved.
 - a. They are important because of their natural beauty.
 - b. 25 per cent of the world's population depends on karst aquifers as a water supply.
 - c. 90 per cent of the world's tourist attractions are found in karst landscapes.
 - d. 99 per cent of the world's population depends on karst aquifers for water supply.
4. Karst landscapes are found underground. **Identify** evidence on the surface of the Earth that might indicate the existence of a karst landscape.
5. **Describe** the distribution of karst landscapes in Australia.

ANALYSE AND APPLY

- The world's largest limestone karst system is found on Oondiri/the Nullarbor Plain in Australia.
 - Oondiri/the Nullarbor Plain is an example of a desert landscape. **Propose** how an environment formed by water can occur in this location.
 - Describe** how you think this landscape would be different if it was located in Australia's tropical north.
- Explain** how the karst landscape can provide us with a link to our distant past.
- Explain** how the karst landscape can provide a quarter of the world's population with water.

EVALUATE AND COMMUNICATE

- Karst is often described as a 'hidden landscape'. **Identify** reasons for this description.
- Propose** a reason for the absence of 'discovered' karst landscapes in Antarctica.

Answers and sample responses for this topic are available online.

LESSON 9.8 The cultural and spiritual significance of landscapes

LEARNING INTENTION

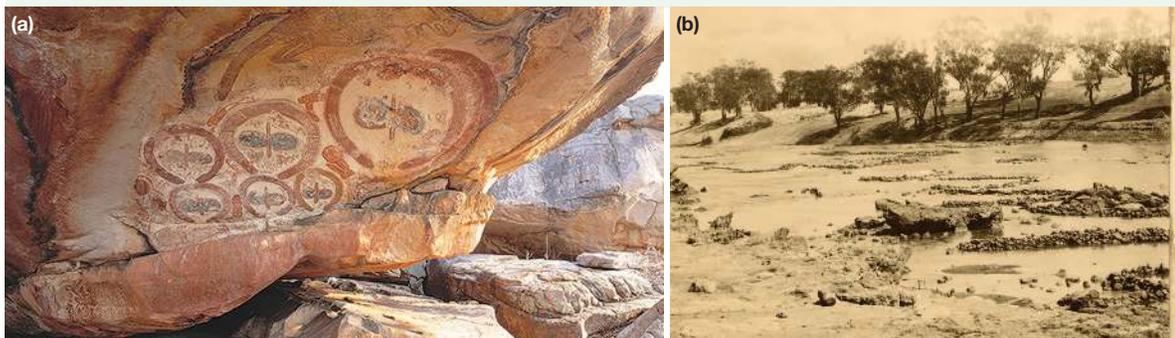
By the end of this lesson you should be able to:

- explain** the cultural, spiritual and aesthetic value of landscapes and landforms to Aboriginal and Torres Strait Islander Peoples
- explain** the importance of shell middens and interpret the evidence they contain.

Tune in

Aboriginal and Torres Strait Islander Peoples are recognised as the first Australians. Evidence of their presence in Australia is found across the continent: in archaeological records, historical photographs and cultural heritage that has been passed down through the generations.

FIGURE 1 Evidence from the past (a) A rock painting depicting a cloud or rain spirit was found in Western Australia's Kimberley region (b) A photograph of a fish trap used by Aboriginal People on the Barwon River, NSW, in the late 1800s



- How old do you think the rock art in FIGURE 1a might be?
- What element of Aboriginal culture do you think is depicted in the rock art in FIGURE 1a?
- How do you think the trap in FIGURE 1b functioned?
- Why is it unlikely for us to find many traps like these remaining today?

9.8.1 The Australian context

Landscapes have formed over millions of years. Aboriginal and Torres Strait Islander Peoples deeply understand Australia's landscapes, nurturing and working with the land. European settlers who arrived in 1788, on the other hand, brought with them the concept of landownership. They sought to change and adapt the landscape to meet their needs, often exploiting it for immediate benefits.

For Aboriginal and Torres Strait Islander Peoples, the land represents belonging and harmony, while the European approach focused on ownership and change.

9.8.2 Purnululu/the Bungle Bungles

Purnululu/the Bungle Bungles, located in Purnululu National Park, in the East Kimberley region of Western Australia, showcase stunning sandstone domes shaped over millions of years. Around 350 million years ago, layers of sand and silt were deposited, later compressed into sandstone. Tectonic uplift exposed these layers, and erosion and weathering sculpted the iconic beehive formations. The orange and black stripes result from differences in moisture retention and the presence of cyanobacteria (blue-green algae).

SkillBuilder discussion

Questioning and researching

1. Look at **FIGURE 2**. Why do you think the Purnululu/Bungle Bungles look like beehives?
2. Purnululu/Bungle Bungles are made of sandstone. Discuss why they have not eroded away.

FIGURE 2 Resembling beehives, Purnululu/the Bungle Bungles rise above the landscape in Purnululu National Park.



The Aboriginal name for the Bungle Bungles is Purnululu, which comes from the Gija people, the traditional custodians of the land. Believed to mean 'fretting sands', the name reflects the spiritual and cultural significance of the area, a heritage dating back over 40 000 years to the Dreaming. During this timeless era, ancestral beings shaped the land, creating its unique features and life forms.

The Gija people's creation story, Jirraginy joo Goorrandal (The Frog and Brolga)

This creation story describes how ancestral beings shaped the land during the Dreamtime. The frog and brolga (a type of bird) played a significant role in forming the landscape, including the features of Purnululu (the Bungle Bungles).

The frog was responsible for releasing water that nourished the land, while the brolga contributed to the formation of the unique domes and features of the area. Together, they brought life to the region, creating the plants, animals and people, and establishing the deep connection between the Gija people and their Country.

9.8.3 The Place of Whadjuk Noongar

The Place of Whadjuk Noongar refers to the traditional lands of the Whadjuk people, a part of the Noongar Nation from the south-west of Western Australia. Their Country includes the Perth region, extending to areas like Fremantle, Armadale and the Swan Coastal Plain. The Whadjuk people have lived in this area for over 45 000 years, maintaining a deep connection to the land, water and its ecosystems.

Significant sites within Whadjuk Noongar Country include Karra Katta/Kings Park, Derbarl Yerrigan/Swan River and Wadjemup/Rottnest Island. These places hold cultural and spiritual importance, often tied to Dreaming stories, such as the wagyl — a water serpent believed to have created the rivers and waterholes. According to tradition, the Derbarl Yerrigan/Swan and Djarlgarro Beelier/Canning rivers were created as the water serpent meandered over the land of the south-west, making the curves and contours of the hills and gullies.

The Whadjuk people follow the six Noongar seasons, which guide their movements and resource use throughout the year. Their knowledge of the land, known as kaartdijin, is passed down through generations, emphasising sustainability and harmony with nature.

FIGURE 3 The Noongar Dreaming story of the Wagyl, the Rainbow Serpent that shaped the Derbarl Yerrigan/Swan and Djarlgarro Beelier/Canning rivers, symbolises the deep spiritual connection of the Noongar people to their land.



Did you know?

The Artesian Range, located in Wilingjin Country in the Kimberley region of Western Australia, holds significant cultural and ecological importance. For the traditional custodians, Ngarinyin people, this area is deeply connected to their heritage, with sacred sites and Dreaming stories tied to the land. The range is also home to unique ecosystems, including rare and endangered species, making it a vital part of Australia's natural and cultural landscape.

9.8.4 Cape Le Grande National Park and Lake Spencer (Pink Lake)

Cape Le Grand National Park, located near Esperance in Western Australia, is renowned for its stunning landscapes and rich biodiversity. The park features pristine white sandy beaches, dramatic granite peaks, and rolling heathlands. Lucky Bay, one of its most famous beaches, is known for its incredibly white sand and friendly kangaroos that often relax on the shore.

Cape Le Grand National Park is located on the traditional lands of the Wudjari people, who are part of the Noongar Nation. The area holds deep cultural and spiritual significance, with sites like Mandooboornup/Frenchman Peak tied to Dreaming stories. These stories describe how ancestral beings shaped the land, creating its unique features and ecosystems.

The Wudjari people have lived in this region for tens of thousands of years, maintaining a profound connection to the land and its resources. Seasonal journeys to and from the coast were guided by freshwater sources and pathways, such as those near Thistle Cove. These places were vital for survival and cultural practices, including ceremonies and storytelling.

Lake Spencer (Pink Lake) is located 62 kilometres away from Cape Le Grand National Park. According to Noongar traditions, the lake's pink colour is tied to a creation story involving a great snake. This snake is said to have turned the water pink, symbolising its spiritual significance. While the lake is no longer pink due to environmental changes, the story remains an important part of the cultural heritage of the Noongar people.

FIGURE 4 Lucky Bay in Cape Le Grande National Park is famous for its white sandy beaches and friendly kangaroos.



SkillBuilder discussion

Analysing

1. Look at **FIGURE 5**. Describe the change to Pink Lake.
2. Discuss the changes to the environment that might have caused the lake to lose its pink colour.
3. Do you think the lake can regain its colour? Explain.

FIGURE 5 Environmental change means the algae that once thrived in the Pink Lake can no longer survive, and the lake has lost its vibrant pink colour.



9.8.5 Shell middens a link to the distant past

Aboriginal and Torres Strait Islander Australians have used coastal environments for at least 65 000 years, practising careful environmental management. Despite changes to Australia's coastline, archaeological evidence, such as **shell middens**, remains.

Scattered across coastal environments are thousands of shell middens. These middens, often found in sheltered coastal spots, contain shellfish remains, bones, stone tools, ash and charcoal — showcasing food storage and cooking practices of Aboriginal and Torres Strait Islander Australians. Carbon dating is used to help determine the age of individual sites. One of the oldest shell middens in Western Australia is the Brremangurey Rockshelter in the Kimberley region, used for over 12 000 years.

Shell middens serve as important archaeological evidence, connecting Australians to the rich history of Aboriginal and Torres Strait Islander Peoples. In regions where physical heritage links are rare, shell middens provide tangible connections to the past. As they are situated in delicate dynamic coastal locations, preserving the historical and cultural significance of these sites is crucial.

SkillBuilder discussion

Questioning and researching

1. Look at **FIGURE 6**. What can you see in this shell midden?
2. What does this suggest about the diet of the people who lived here thousands of years ago?

FIGURE 6 Shell middens



9.8 SkillBuilder activity

QUESTIONING AND RESEARCHING

Shell middens and rock art are examples of Aboriginal and Torres Strait Islander archaeological sites. Use the internet to find an example of an Aboriginal and Torres Strait Islander archaeological site in Australia.

1. **Identify** and describe the site.
2. **Explain** why it is historically and culturally significant.

9.8 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 3, 4

■ LEVEL 2

5, 6, 7

■ LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

1. According to Creation stories, why is Lake Spencer pink?
 - a. The natural minerals in the area gave the lake its pink colour.
 - b. A great snake turned it pink to symbolise its spiritual significance.
 - c. Too many animals were killed in the area and their blood turned the lake pink.
 - d. All lakes were once pink, and Lake Spencer has kept this colour.
2. Consider the Australian landscape and **outline** the differences between the way it was viewed by Aboriginal and Torres Strait Islander Peoples and European settlers.
3. Identify whether the following statements are True or false.
 - a. Aboriginal and Torres Strait Islander Peoples see the land as something to farm and develop, whereas the European tradition is that people are custodians of the land.
 - b. Aboriginal and Torres Strait Islander Peoples look after the land as a community, whereas the European tradition is that people live on and own one specific piece of land.
 - c. Aboriginal and Torres Strait Islander Peoples exploited the land, whereas the European tradition involved careful management of the land and its resources.

4. Answer the following questions.
 - a. **Explain** the natural processes that have led to the unique landscape we know as Purnululu/the Bungle Bungles.
 - b. **Describe** how the Gija people believe this environment was created.
5. Select the correct term for the following sentence: One of Western Australia's oldest shell middens is located at **Armadale / Brremangurey Rockshelter**, and it is over **12 000 / 20 000 / 32 000** years old.
6. Select what evidence there is in shell middens that suggests that Aboriginal and Torres Strait Islander Peoples cooked their food.
 - a. Cutlery marks on shells
 - b. Charcoal and ash found around the middens
 - c. Cooking utensils found among the shells
 - d. All of the above

ANALYSE AND APPLY

7. Answer the following questions.
 - a. **Explain** what a shell midden is.
 - b. **Explain** why it is important to preserve shell middens.
8. Answer the following questions.
 - a. Most shell middens are found within a few kilometres of the coastline.
Explain why this location would make these sites so vulnerable.
 - b. **Suggest** a way shell middens can be protected and preserved.
 - c. **Suggest** how shell middens could be used to boost tourism in regional areas.

EVALUATE AND COMMUNICATE

9. **Explain** how we have an extensive knowledge of Aboriginal and Torres Strait Islander Peoples' culture, history and beliefs.
10. Some middens have been found far from current coastal areas. **Suggest** how this is possible.

Answers and sample responses for this topic are available online.

LESSON 9.9 Plate tectonics

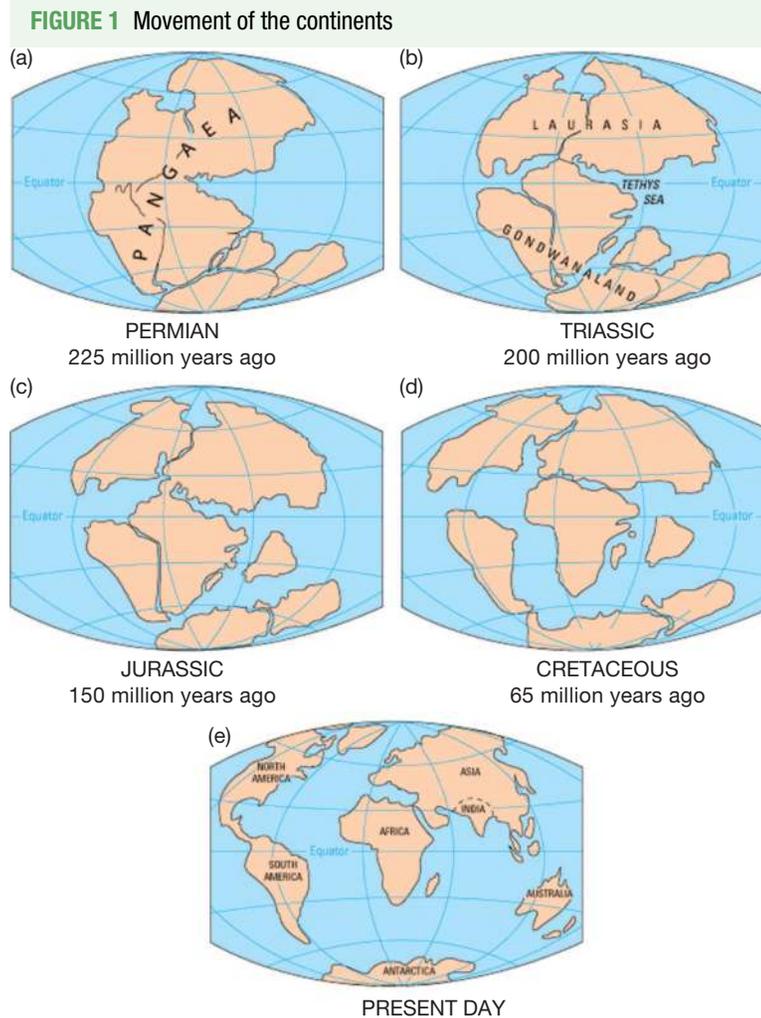
LEARNING INTENTION

By the end of this lesson you should be able to:

- **define** the key terms associated with plate tectonics
- **explain** the reasons why continental plates move
- **identify** the landforms that are created as a result of plate movement.

Tune in

Examine **FIGURE 1**. The continents used to be joined together in one landmass called **Pangaea**. Over time they moved and spread out into the formation that exists today.



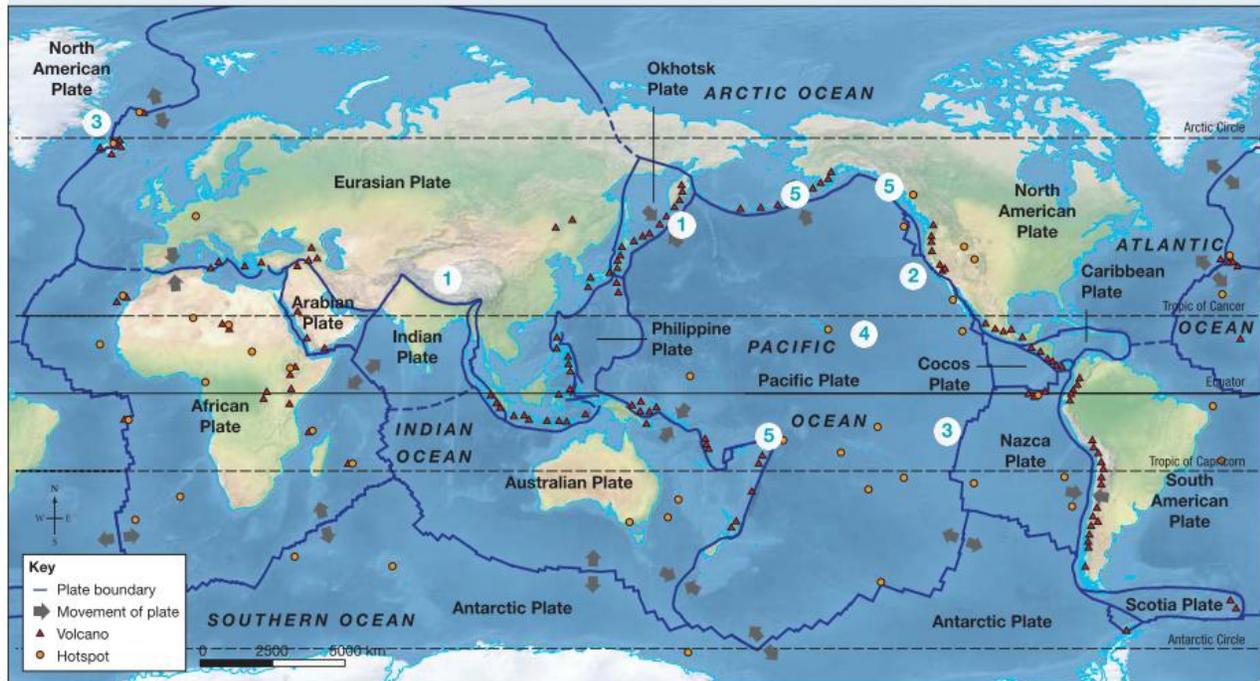
1. In pairs, mind-map and explain:
 - why you think the continents move
 - what evidence there might be to support this theory.
2. Make a list of three to four questions that you want answered after looking at these images. See if you can answer them by the end of the topic.

Tectonic plates

The Earth's crust is cracked and is made up of many individual moving pieces called tectonic plates, which fit together like a jigsaw puzzle. These plates float on the semi-molten rocks (magma) of the Earth's mantle.

Enormous heat from the Earth's core, combined with the cooler surface temperature, creates **convection currents** in the magma. These currents can move the plates by up to 15 centimetres per year. Plates beneath the oceans move more quickly than plates beneath the continents. Scientific evidence shows that about 225 million years ago all the continents were joined.

FIGURE 2 World map of plates, volcanoes and hotspots



Source: Map drawn by Spatial Vision

SkillBuilder discussion

Analysing

1. Look at **FIGURE 2**. Explain the interconnection between plate boundaries (faults) and earthquakes.
2. Identify which of Australia's neighbours experience earthquakes and have volcanoes.
3. Describe why Australia experiences few major earthquakes.

TABLE 1 Plate movements

Type of plate movement	Description	Examples
Convergent plates	When two continental plates of similar density collide, the pressure of the converging plates can push up land to form mountains.	Himalayas (India and Asia), Alps (Africa and Europe)
	Oceanic and continental plates have different densities, so when they collide, the thinner oceanic plate is ' subducted ', and melts. Molten matter returns to the surface through fissures and cracks, creating mountains and volcanoes.	Andes (South America)

	When two oceanic plates collide, this forms a line of volcanic islands in the ocean about 70–100 kilometres past the subduction line.	Japan, Philippines, Mariana Trench
Lateral plate slippage	Convection currents can sometimes cause plates to slide, or slip, past one another, forming fault lines.	San Andreas Fault (California)
Divergent plates	In some areas, plates are moving apart, or diverging. As the divergent plates separate, magma can rise up into the opening, forming new land.	Iceland, underwater volcanoes and islands The Great Rift Valley, Africa
Hotspots	Volcanic eruptions that occur away from plate boundaries due to a weakness in the oceanic plate, forcing magma to the surface, forming a volcano. As the plate drifts over the hotspot, a line of volcanoes is formed.	Hawaiian Islands
Pacific Ring of Fire	This is the most active tectonic region, a horseshoe-shaped zone around the Pacific Ocean created by tectonic plate movement. The Pacific Plate is sinking under the North American Plate in the east and north and the Philippines and Australian plates in the west. Holding 75 per cent of the world's active volcanoes, most earthquakes occur here.	Nazca and Cocos plates (South America), Pacific Plate (North America, Philippines)

SkillBuilder discussion

Analysing

1. Are most plate boundaries found on land or in the ocean?
2. Describe where the landmass of Australia is located on the Australian Plate.
3. Describe the interconnection between plate boundaries and volcanoes around the Pacific Ring of Fire.

Did you know?

The Australian Plate is moving northward at a rate of approximately seven centimetres per year. It is one of the fastest-moving continental plates on Earth. At this rate Australia will reach the equator in around 40 million years.

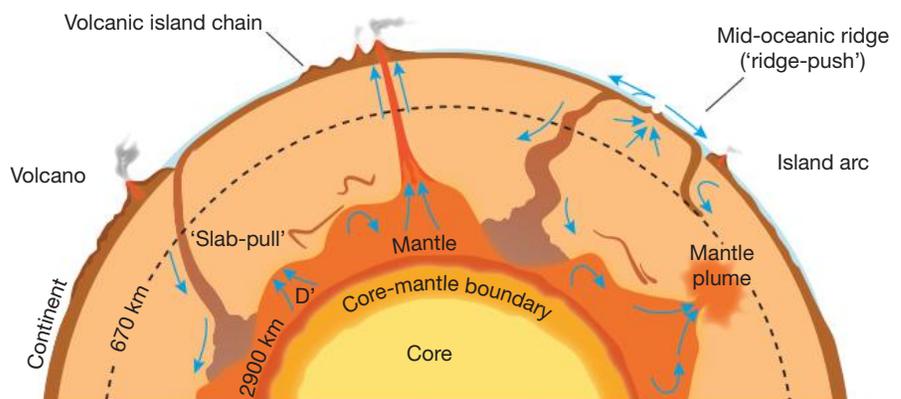
SkillBuilder discussion

Communicating and reflecting

1. Look at **FIGURE 3**. Explain why tectonic plates move.
2. Identify the type of landform found where plates move away from each other.
3. Outline what landforms are found where one plate subducts under another.



FIGURE 3 The Earth's core is very hot, while its surface is quite cool. This causes hot material within the Earth to rise until it reaches the surface, where it moves sideways, cools and then sinks.



9.9 SkillBuilder activity

QUESTIONING AND RESEARCHING, COMMUNICATING AND REFLECTING

AND REFLECTING

1. **Investigate** how plate tectonic theory first came to be accepted.
 - a. **Identify** who came up with this theory.
 - b. **Outline** three types of evidence cited to prove this theory.
2. **Construct** annotated diagrams of the three major plate boundaries. Make sure you include in your diagrams the direction of the flow of the convection current in the mantle. Include the following:
 - Convergent boundary (subduction zone)
 - Lateral plate boundary
 - Spreading plate boundary

9.9 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 6

■ LEVEL 2

3, 5, 7, 8

■ LEVEL 3

4, 9, 10

REMEMBER AND UNDERSTAND

1. a. True or false?
 - i. The world's volcanoes are randomly scattered over the Earth's surface.
 - ii. Most of the world's volcanoes are concentrated along the edges of certain continents.
 - iii. Island chains are closely linked with the location of volcanoes.
 - iv. There are no active hotspots within the Pacific Ocean.
- b. **Use** the statements from parts **a–d** to write a **summary** paragraph, remembering to rewrite the false statements to make them true.
2. Convection currents:
 - A. are the force that moves continents.
 - B. are caused by heat rising and then cooling.
 - C. start beneath the Earth's surface in the core and travel through the mantle.
 - D. are all of the above.
3. The hotspot that helped form the Hawaiian Islands is:
 - A. in the Central Pacific Ocean.
 - B. in the Atlantic Ocean.
 - C. no longer active.
 - D. under the Antarctic ice sheet.
4. **Explain** the meaning of subduction when referring to plate movements. In your explanation include the plate that remains and the plate that subducts.
5. **Recall** two locations where plates are moving apart. **Explain** what is happening in these places.
6. **Identify** the type of plate boundaries that surround the Pacific Ocean.
7. **Explain** why Australia has so few earthquakes or active volcanoes.

ANALYSE AND APPLY

8. **Describe** the distribution of volcanoes shown in **FIGURE 2**. **Suggest** what this distribution has in common with the location of plate boundaries.
9. Refer to **FIGURE 2**. **Propose** why Australia has no active volcanoes and relatively few earthquakes.
10. Refer to **FIGURE 2**. **Identify** three places where plates are converging. **Identify** the mountain ranges, if any, that are located in these places.

Answers and sample responses for this topic are available online.

LESSON 9.10 Earthquakes and tsunamis

LEARNING INTENTION

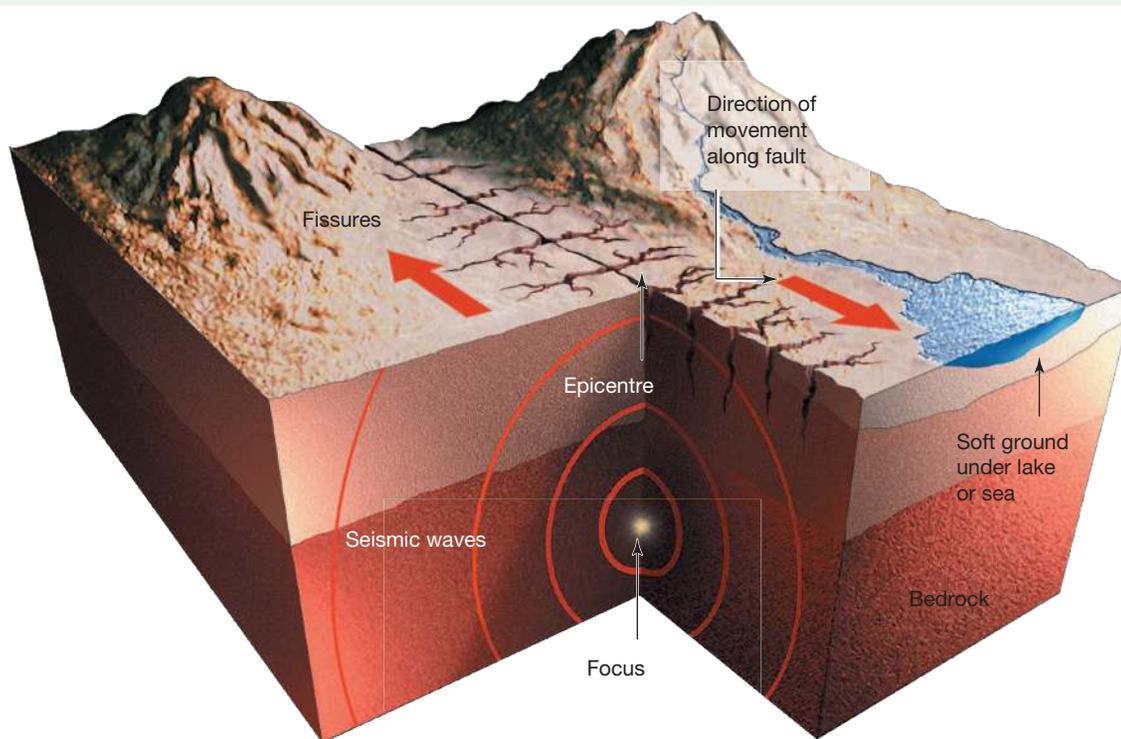
By the end of this lesson you should be able to:

- **explain** why earthquakes occur and how they are measured
- **explain** the interconnection between earthquakes and tsunamis
- **explain** why tsunamis are different to other types of waves.

Tune in

The **FIGURE 1** diagram explains what occurs during an earthquake.

FIGURE 1 What happens during an earthquake?



1. Discuss what you think might be the difference between the focus and epicentre of an earthquake.
2. What factors might contribute to some earthquakes resulting in a lot of damage whereas others result in little damage?

9.10.1 Earthquakes

An earthquake is sudden ground shaking caused by **seismic waves** passing through the Earth's crust. Most earthquakes occur near tectonic plate boundaries, where weaknesses called faults (or the **fault plain**) exist (see **FIGURE 2** in lesson 9.9). An earthquake results from the sudden movement of rock layers at these faults.

The **focus** is the point where the earthquake begins (see **FIGURE 1**). Earthquakes can occur near the surface of the Earth or up to 700 kilometres below. The shallower the focus, the more powerful the earthquake will be. From the focus, seismic waves radiate like ripples, weakening as they move away from the **epicentre**.

There are three main types of seismic waves:

- **Primary waves** (or P-waves) arrive first and are felt as a series of jolts. They travel at speeds up to 30 000 kilometres per hour.
- **Secondary waves** (or S-waves) arrive a few seconds after P-waves, causing a sustained up-and-down movement. They travel at half the speed.
- **Surface waves** arrive after the main P-waves and S-waves, causing side-to-side or circular ground motion. Potentially resulting in the collapse of buildings.

FIGURE 2 The violent shaking that occurs with earthquakes can cause landslides (a) and liquefy the soil, causing buildings to collapse and swallowing cars (b).



Earthquakes may result in large fissures opening in the ground, building collapse and the **liquefaction** of soil.

Measuring earthquakes

Earthquakes are measured according to their magnitude (size) and intensity. There are three ways we measure earthquakes.

TABLE 1 Scales for measuring earthquakes

Scale	Description
The Richter scale	Developed in 1935, the Richter scale was long used to measure earthquake magnitude. It is logarithmic, meaning each number is 10 times larger in magnitude than the previous one. For example, a magnitude 5 earthquake is 10 times stronger than one with magnitude 4.
The modified Mercalli scale	This scale measures the amount of damage caused by an earthquake. Where an earthquake rates on this scale depends on human factors, such as the strength of buildings and population density.
The moment magnitude scale	This scale is used by seismologists today to measure the total amount of energy released during an earthquake and is more accurate, particularly for larger earthquakes, than the Richter scale. It reflects the distance the fault is moved and the force required to move it. For media purposes, seismologists convert the M_w recordings are converted to a Richter scale number, because that is the measurement most people are familiar with.

9.10.2 Tsunamis

A tsunami is a large ocean wave caused by sudden motion on the ocean floor, such as an earthquake, volcanic eruption or underwater **landslide**. About 90 per cent of tsunamis occur in the Pacific Ocean, mostly due to earthquakes over 6.0 on the Richter scale.

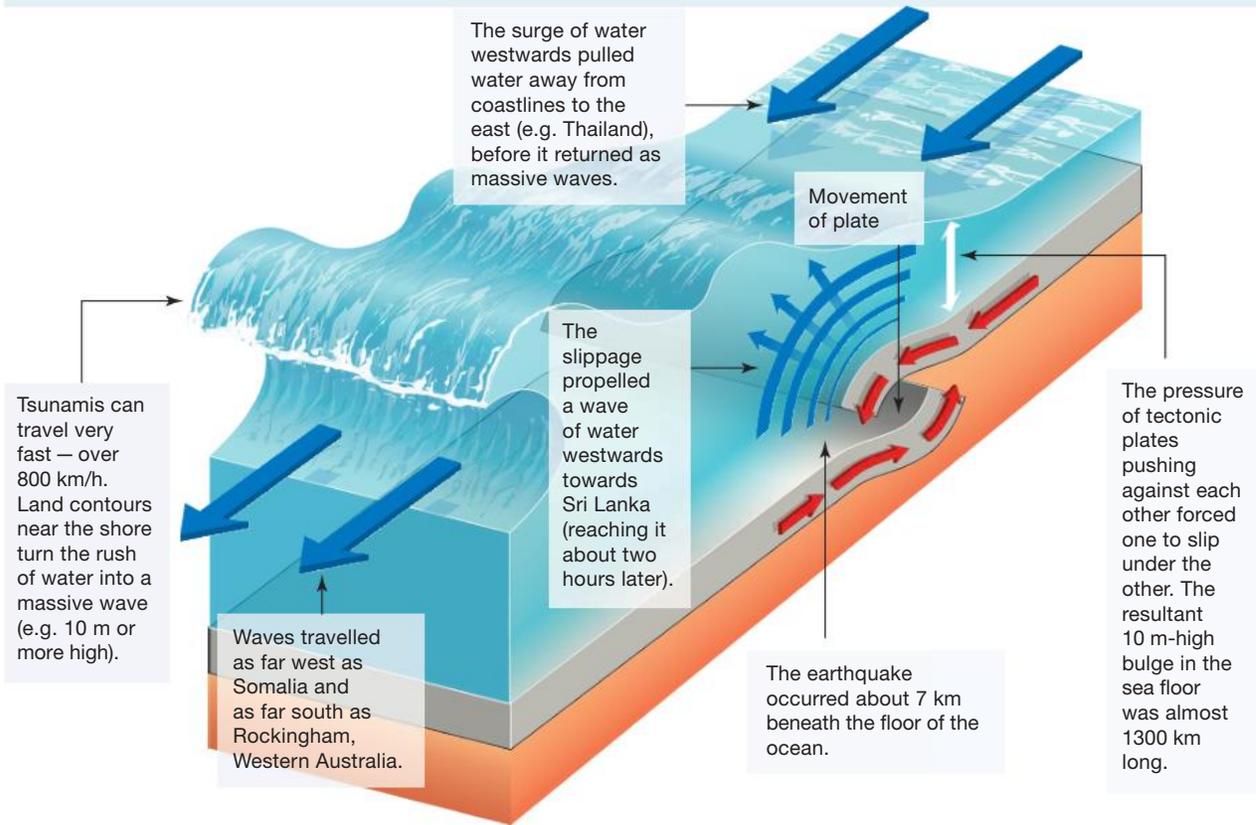
At sea, tsunamis are almost undetectable because they travel extremely fast (about 970 km/h) with a wavelength of about 30 km and a wave height of only one metre.

When tsunamis reach the continental slope, they slow down, wave height increases and wavelength decreases. The sea may recede quickly, indicating a tsunami is coming, and it's best to head to higher ground immediately.

A tsunami consists of multiple waves (five to 20), arriving at intervals between ten minutes and two hours. The first waves may be small, with no apparent pattern in size.



FIGURE 3 In 2004, an earthquake and subsequent tsunami in the Indian Ocean occurred along the boundary between tectonic plates.



SkillBuilder discussion

Questioning and research

1. Explain why the scale of the Indian Ocean tsunami in 2004 was so large.
2. Use a world map to measure the distance the tsunami travelled from the source.
3. Research the impact this tsunami had on life and property across nations with an Indian Ocean coastline.

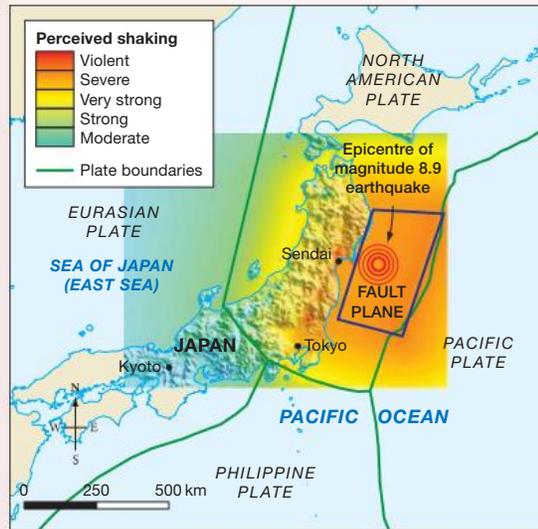
CASE STUDY

The Japanese earthquake and tsunami, 2011

The region of Japan is seismically active because four plates meet there: the Eurasian, Philippine, Pacific and North American plates. Many landforms in this region are influenced by the collision of oceanic plates. Chains of volcanic islands called island arcs are formed, and an ocean trench is located parallel to the island arc (see **FIGURE 2** in lesson 9.9).

The 2011 Tōhoku earthquake and tsunami, also known as the Great East Japan Earthquake, struck on 11 March 2011, as a magnitude 9.0–9.1 megathrust earthquake — the strongest ever recorded in Japan. Its epicentre was located 72 kilometres east of the Oshika Peninsula, and the quake lasted approximately six minutes. The focus of the earthquake was located 29 kilometres below the seafloor in a subduction zone where the Pacific Plate was forced under the North American Plate, releasing tremendous energy that caused massive tremors and triggered the tsunami.

FIGURE 4 The location and magnitude of the earthquake that caused the Japanese tsunami



Source: Map drawn by Spatial Vision

The earthquake triggered a tsunami with waves up to 40.5 metres high, travelling as far as ten kilometres inland, which obliterated entire coastal towns. 19 747 people were killed, with hundreds of thousands more displaced due to homes being destroyed and flooding. More than 120 000 buildings were destroyed. This tsunami also led to the Fukushima Daiichi nuclear disaster, where radioactive materials were released into the environment.

The main earthquake was followed by thousands of aftershocks, some exceeding magnitude 7.0, which caused further damage and hindered rescue and recovery efforts.

It is estimated the cost of the earthquake and tsunami was US\$360 billion:

- US\$199 billion: direct damage, such as destruction to property, infrastructure and immediate recovery costs
- US\$166 billion: indirect and long-term economic impacts, such as supply chain disruptions, loss of productivity and extended recovery efforts

FIGURE 5 The tsunami caused by the 9.0-magnitude earthquake in March 2011 swept over the coastline at Sukuiso and inland, carrying debris with it.



SkillBuilder discussion

Analysing

1. **Identify** the role debris would play in increasing the damage from a tsunami.
2. **Explain** the issues the Japanese authorities would face in the aftermath of this disaster.
3. **Discuss** why trees in the top photo survived, yet the buildings around them were destroyed.

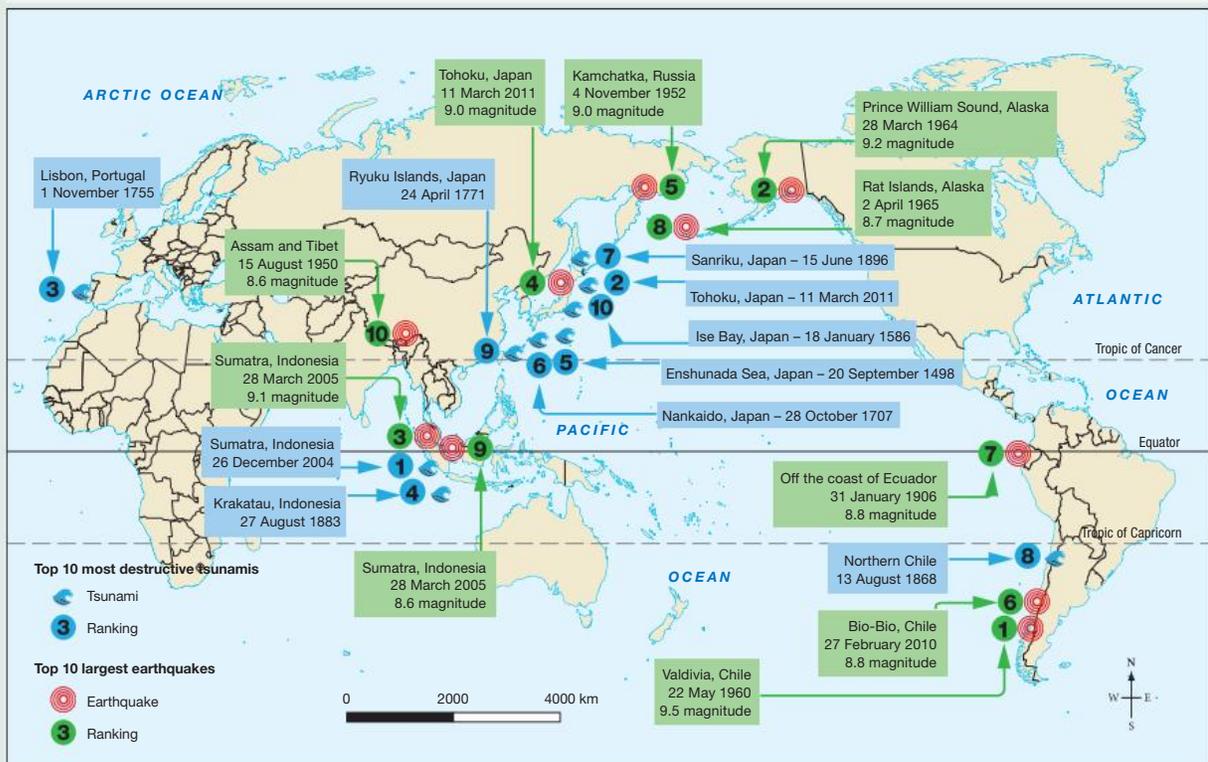
Preparing for earthquakes and tsunamis

While we cannot prevent earthquakes and tsunamis, Japan has developed strategies to prepare for and mitigate their impacts:

- Building codes ensure that structures can withstand seismic activity, reducing the risk of collapse.
- Seawalls and tsunami barriers reduce the impact of tsunamis on coastal communities.
- Early warning systems provide advance alerts, enabling evacuation.
- Public education and drills teach people how to respond during an emergency.
- Evacuation routes and shelters are clearly marked.
- Households are encouraged to stockpile emergency supplies such as food, water and medical supplies.

9.10 SkillBuilder activity ANALYSING AND EVALUATING

FIGURE 6 The ten largest earthquakes and ten most destructive tsunamis in recorded history



Source: Map drawn by Spatial Vision

1. **Identify and list** the five largest earthquakes.
2. **Identify and list** the five most destructive tsunamis.
3. Choose one earthquake and one tsunami from your responses to questions 1 and 2 and research these events. Provide an outline of the economic, social and environmental impact of your chosen disasters.

Learning pathways

■ LEVEL 1

1, 4, 5

■ LEVEL 2

2, 3, 6, 7

■ LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

- Complete** the following statements by filling in the blanks.
The point where the actual earthquake occurs under the surface is called the _____. The point directly above this on the Earth's surface is known as the _____. The shallower the earthquake, the more _____ the earthquake will be. Energy travels out from an earthquake in _____. The strength of an earthquake can be measured on the R_____s_____, the m_____ M_____s_____ and, most often used by seismologists in recent times, the m_____ m_____s_____.
- Explain** how an earthquake occurs. **Construct** a diagram to assist your explanation.
- Explain** how primary waves differ from secondary waves of earthquakes.
- The Richter scale measures earthquake magnitude. How much more powerful is the magnitude of an earthquake at 7.0 than at 5.0?
 - 2 times greater
 - 10 times greater
 - 100 times greater
 - 1000 times greater
- True or false?
 - Most tsunamis occur in the Atlantic Ocean.
 - Underwater landslides can trigger tsunamis.
 - In deep water, tsunamis can travel at up to 970 km/h and can be undetectable by boats.
 - A tsunami is a single wave.

ANALYSE AND APPLY

- Study **FIGURE 3**. Use your own words to explain how a tsunami occurs.
- Read through the 9.10 case study. **Discuss** how the location of the epicentre of the earthquake that caused the Japanese tsunami impacted the ability of people to prepare for the incoming tsunami.
- Study **FIGURE 4**.
 - Estimate** the size of the fault plane that moved vertically during this quake.
 - Discuss** why this was significant.
 - State** which tectonic plates were involved in this event.

EVALUATE AND COMMUNICATE

- Imagine you are a television news reporter reporting on the Japanese earthquake and tsunami.
 - Describe** what you observed and felt when the earthquake occurred.
 - Refer to **FIGURES 2** and **5** to describe what you see and what might be happening to the people in the area during the earthquake and tsunami.
 - Prepare an eyewitness account that describes what a local resident did to prepare for and take care of their family during the tsunami.
- Create** a flow chart or cartoon strip that explains the journey of a tsunami from creation through to coming ashore.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how volcanoes are formed and the processes that cause volcanic eruptions
- **outline** the relationship between plate boundaries and volcanoes
- **describe** the impact of volcanoes on people and the environment
- **identify** strategies to reduce the impact of a volcanic eruption.

Tune in

Look closely at **FIGURE 1**. In the area around the erupting volcano, you can see the lights of a built-up area.

FIGURE 1 An erupting volcano in Spain



1. Suggest why people would be living so close to an erupting volcano.
2. Describe what you can see being erupted. What impact might it have on the surrounding land?

9.11.1 How do volcanoes form?

A volcano is a cone-shaped hill or mountain formed when magma from the mantle escapes through a vent in the lithosphere. The volcano erupts as lava, ash, rocks and volcanic gases build up around the vent, through which they erupt.

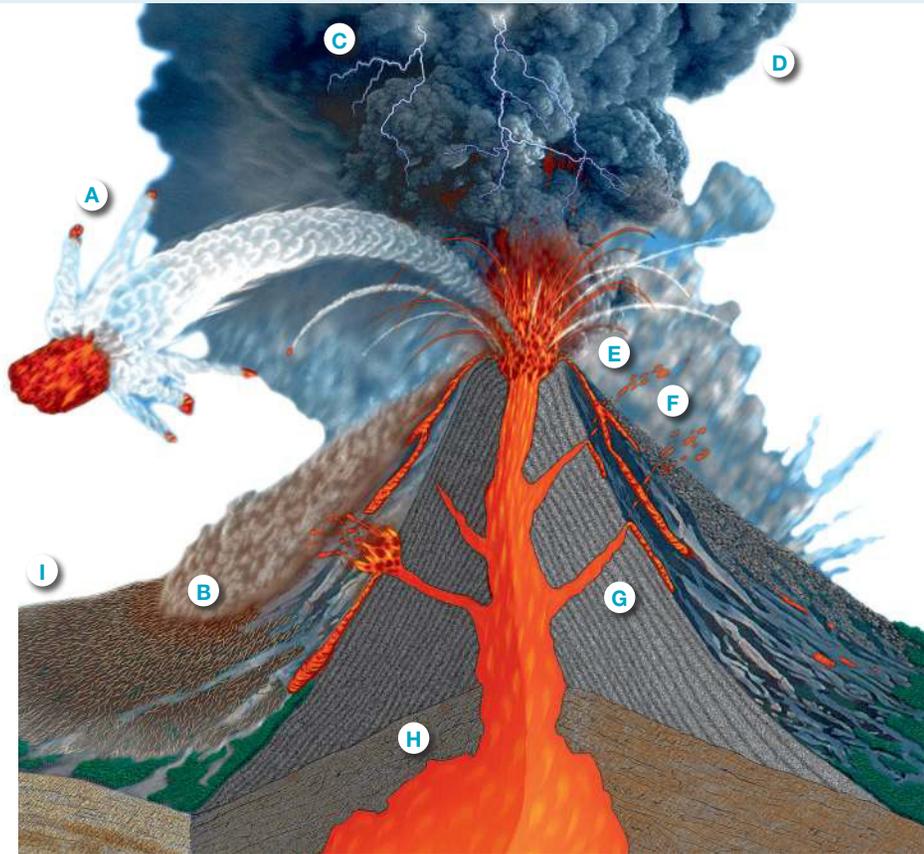
Most active volcanoes occur near plate boundaries, either where plates converge or diverge (see **FIGURE 2** in lesson 9.9). Some volcanoes also form over hotspots.

SkillBuilder discussion

Evaluating

1. Look at **FIGURE 2**. Describe the different types of materials that can be erupted from a volcano.
2. Evaluate which type of eruption would be the most dangerous.
3. Explain why lahars would be linked to ice-covered volcanic peaks.

FIGURE 2 The structure of a volcano



- A** Volcanic bombs are fragments of lava less than 64 millimetres in diameter; they are often solid pieces from the last eruption that formed part of the cone.
- B** Pyroclastic flow is a superheated avalanche of rock, ash and lava rushing down a mountain at up to 240 kilometres per hour. It can reach temperatures of 800 °C.
- C** Lightning is often generated by the friction of swirling ash particles.
- D** Ash clouds are created when pulverised rock becomes fine ash, carried by wind as a cloud; ash blanketing the ground can be metres thick.
- E** Volcanic cone is composed by layers of ash and lava from previous eruptions; it's eroded if the volcano is dormant for thousands of years.
- F** Lava flow is runny or viscous lava that flows for many kilometres, building up the Earth's surface when solidified.
- G** Branch pipe/side vent occurs when pressure forces magma through the side of a volcano; it may become the main vent during an eruption.
- H** Plate divergence and magma occur when molten mantle rock flows upward into a magma chamber at plate boundaries; magma erupts violently at 700–1300 °C.
- I** Lahar is a wet mixture of melted snow, ice, rocks and debris rushing down volcanoes, causing destruction.

Did you know?

Both the 1902 Mount Pelée eruption on the island of Martinique and the 79 CE Mount Vesuvius eruption in Italy unleashed deadly pyroclastic flows. Mount Pelée devastated the town of Saint-Pierre, with flows reaching temperatures of around 800 °C, killing nearly 30 000 people. Vesuvius buried Pompeii and Herculaneum in flows exceeding 500 °C, preserving the towns under layers of ash for centuries.

Did you know??

In 1985, a lahar from Colombia's Nevado del Ruiz volcano caused catastrophic destruction. Triggered by pyroclastic flows that melted snow and ice, the lahar reached speeds of up to 50 km/h and heights of 40 metres. It devastated the town of Armero, killing over 23 000 people and destroying 5000 homes — a chilling reminder of volcanic power.

Subduction zones

Some volcanoes are formed when an oceanic plate is pulled underneath a continental plate (see lesson 9.9). As the crust is forced down, it heats up and becomes magma. It can then rise to the Earth's surface through a magma chamber.

Volcanoes and rift zones

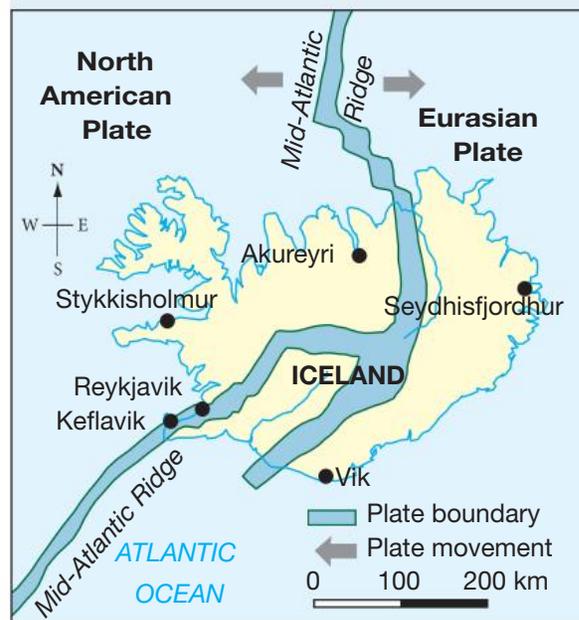
The Mid-Atlantic Ridge, the world's longest mountain range at 56 000 km, lies underwater between Africa and the Americas. It is made up of volcanic mountains formed in **rift zones** where plates diverge. The largest mountains rise above the water as islands. Lava rising between plates creates islands like Iceland, the Azores, and Bouvet Island. Rifting occurs on land or seabeds.

SkillBuilder discussion

Analysing

1. Look at **FIGURE 3**. Identify the two plates involved in the formation of Iceland.
2. Describe what is happening at this plate boundary (fault).
3. Which population centres in Iceland may be at risk as a result of volcanic activity?

FIGURE 3 Rifting in Iceland



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

The Mid-Atlantic Ridge passes through Iceland, where the island is splitting in two. Iceland's volcanoes mark the rift where the North American Plate moves west, and the Eurasian Plate moves east (see **FIGURE 3**). New crust forms below the sea and, eventually, the Atlantic Ocean will fill the widening gap.

The Great Rift Valley in Africa (see **FIGURE 5**) is about 5000 km long, stretching from Syria to Mozambique. The valley ranges in width from 30 km to 100 km and in depth from hundreds to thousands of metres.

It formed 35 million years ago as the African and Arabian plates separated. Around 15 million years ago, East Africa began splitting from the rest of the continent along the East African Rift. Volcanic activity has created mountains like Mount Kilimanjaro, Mount Kenya and Mount Elgon. Over time, ocean waters may fill the rift, dividing the land.

As these rifts continue to grow, ocean water will flow into the valleys, separating the landmasses.

FIGURE 4 A volcanic fissure in Iceland

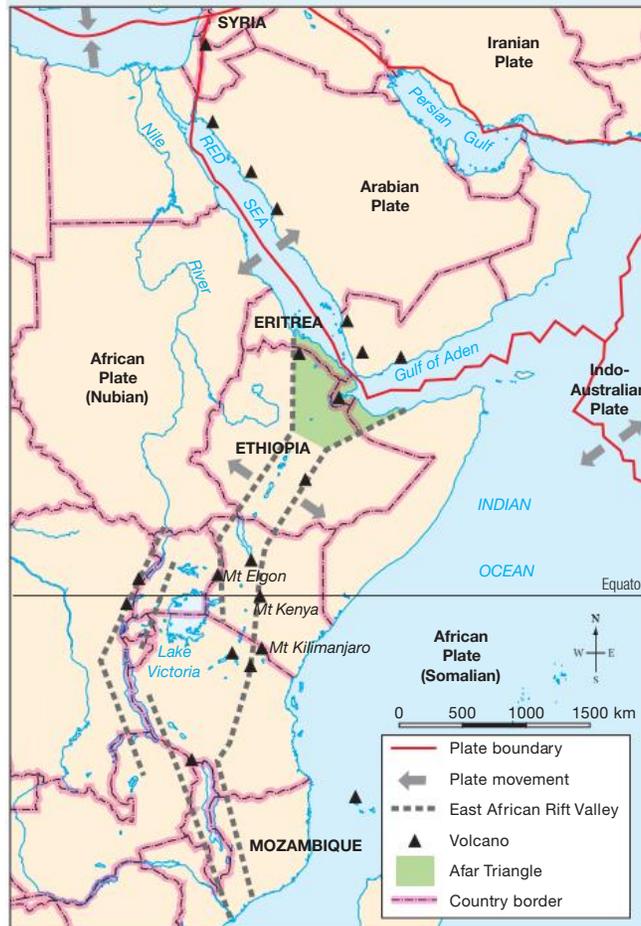


SkillBuilder discussion

Communicating and reflecting

1. Identify the tectonic plates involved in the formation of the Great Rift Valley.
2. Describe why this valley has formed.
3. Draw a series of sketches to show what you predict will happen to the African landmass as the Great Rift Valley continues to rift. Include a map of Africa showing the change in shape that might occur. You need to annotate your sketches to justify the predictions you have made.

FIGURE 5 The Great Rift Valley, Africa



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

Volcanic hotspots

Some volcanoes form above hotspots, where plumes of mantle rise away from plate boundaries. As tectonic plates slowly move over these hotspots, chains of volcanoes can appear. Hotspots occur in oceans and on continents, such as the Hawaiian Islands and Australia's extinct volcanoes. Hawai'i's volcanic island locations reveal the direction and speed of plate movement.

Did you know?

About 500 million people live close to active volcanoes.

9.11.2 Why do people live near volcanoes?

Geoscience Australia (a national organisation that provides geographic information to the government) estimates that 180 million people in the Asia–Pacific region live within 50 kilometres of a dangerous volcano. There is also a strong relationship between the location of volcanoes and resources such as fertile soils, ore deposits and **geothermal energy**.

Fertile soils

Volcanic activity has created some of the planet's most fertile soils through nutrient-rich ash deposits and the gradual breakdown of volcanic rocks. These soils are crucial for agriculture. Some examples are:

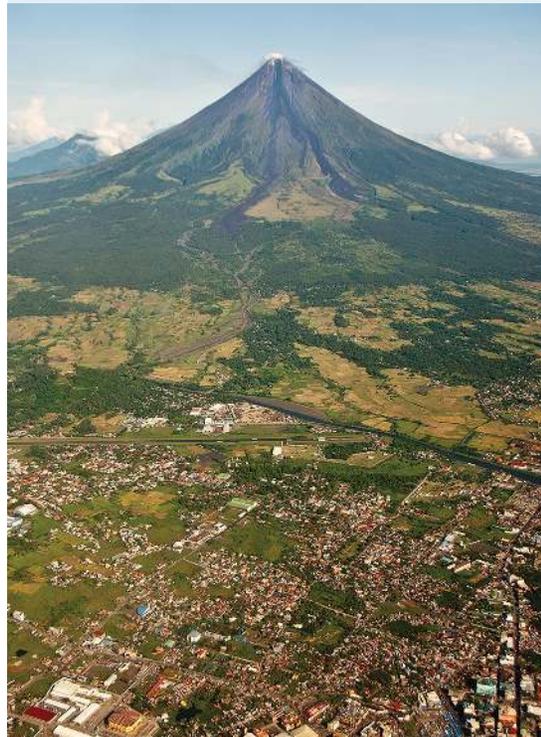
- rice cultivation in Japan and across Indonesia, particularly on Java and Bali
- farming regions in Naples, southern Italy, despite generally poor soils
- New Zealand (North Island) where **volcanic loam** sustains crops and pastures
- agricultural areas in the western plains of the United States and the Hawaiian Islands
- fertile basalt soils in Australia, found along the east coast, parts of Tasmania and regions like Victoria's volcanic plains and the Atherton Tablelands.

SkillBuilder discussion

Evaluating

1. Explain the risks associated with living so close to an active volcano.
2. Discuss the benefits of living in the town pictured.
3. Do the risks outweigh the rewards of living near volcanoes?

FIGURE 6 Agricultural settlement near Mayon Volcano in the Philippines



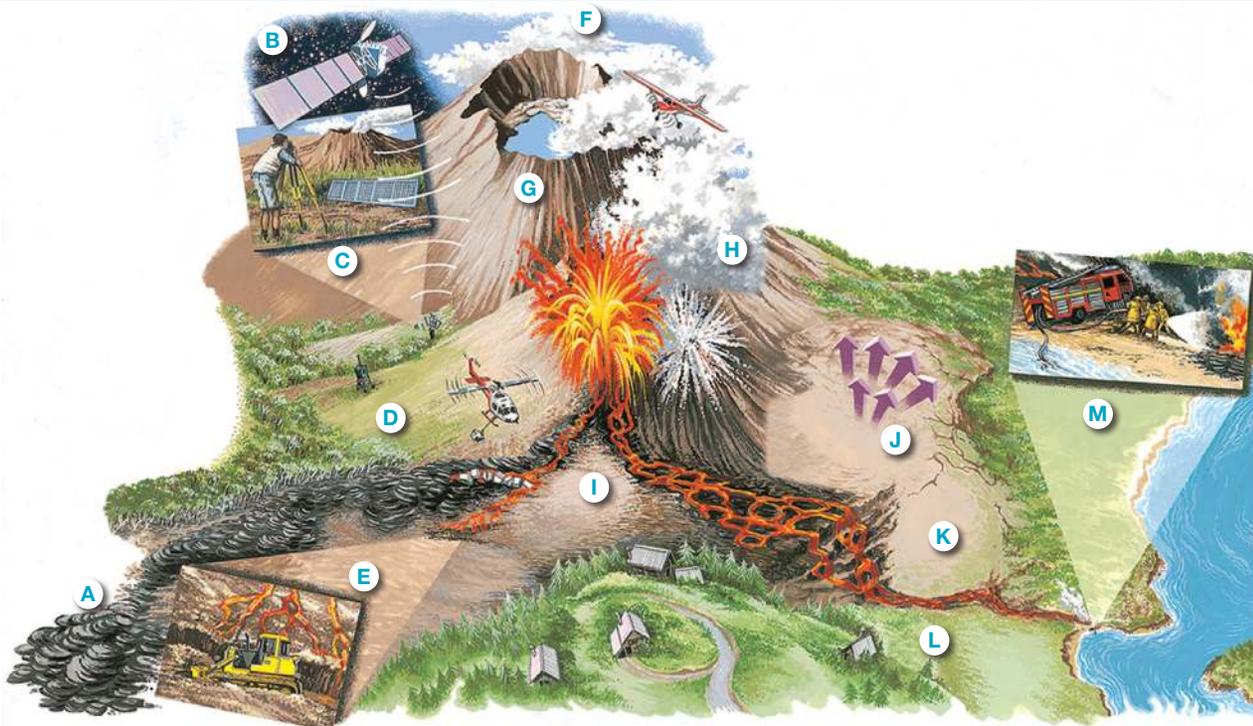
Geothermal energy

Geothermal energy harnesses heat from active or dormant volcanoes beneath the Earth's surface. High-temperature hot springs and **geysers** produce steam to drive turbines and generate electricity, while lower-temperature hot water is used for home heating or resort spas. In Iceland, geothermal energy generates over a quarter of its electricity and provides heating for over 85 per cent of homes. Other leading users of geothermal energy include the United States (California), Italy, New Zealand and Japan.

9.11.3 Predicting volcanic eruptions



FIGURE 7 Predicting volcanic eruptions



- A** Geologists study past eruptions by looking at mud, lava and ash flow patterns. These patterns help create danger maps, identifying hazardous areas.
- B** Satellites monitor changes in gas emissions and the shape of volcanoes. Heat increases are measured using specialised equipment.
- C** Seismographs detect small earthquakes caused by rising magma. These are linked to computers via transmitters for quick analysis.
- D** Sound-measuring equipment accurately predicted a volcanic eruption in Mexico in 2000.
- E** In 1983, barriers and a channel diverted lava away from Mount Etna towns Rocco and Ragalna. The lava slowed and solidified before reaching the towns.
- F** Gas samples are analysed for sulphur dioxide (SO₂), which can indicate magma is moving upwards.
- G** A rise in the temperature of a crater lake often precedes an eruption.
- H** In 1935, explosives were used to breach crater walls and redirect lava flows away from towns.
- I** Helicopters have been used to drop concrete blocks in front of flowing lava.
- J** As magma accumulates in magma chambers, the cone may bulge outwards. Sensitive tiltmeters on the ground and satellites can detect this bulging.
- K** Bulging causes tiny cracks to appear.
- L** Buildings in ash-prone areas should be designed with steeply sloping roofs to prevent ash accumulation.
- M** In 1973, seawater was sprayed onto lava that was threatening a town in Iceland. This intervention rapidly cooled and solidified the lava, protecting the town.

SkillBuilder discussion

Questioning and researching

1. Study **FIGURE 7**. List the different techniques that have been used to try to stop the flow of lava.
2. Which technique do you think is the most effective and why?
3. Outline the ways in which geologists try to predict volcanic eruptions.

9.11 SkillBuilder activity

COMMUNICATING AND REFLECTING

1. **Investigate**, conducting research, to find pictures of volcanic landforms and materials. These include crater lakes, geysers, calderas, fields of ash deposits, volcanic plugs, lava tubes, hummocks and pumice. You could also find pictures of the two types of lava, aa and pahoehoe.
2. Use your pictures to **construct** a field guide to volcanic landforms. Each page should contain a picture of the landform, a brief description and a place where it can be found — sometimes they are tourist attractions.

9.11 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 5, 7

■ LEVEL 2

3, 4, 6

■ LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

1. Almost all volcanoes are found:
 - A. near plate boundaries.
 - B. near the ocean.
 - C. exclusively near subduction zones.
 - D. in Asia.
2. Iceland has formed:
 - A. where a subduction zone has led to significant volcanic activity.
 - B. where two plates are drifting apart.
 - C. as a result of earthquakes pushing the crust above the ocean.
 - D. where two landmasses have been pushed together to form an island.
3. Determine whether the following statements are True or False.
 - a. Volcanoes can erupt ash, gas and magma in the same eruption.
 - b. The type of lava that erupts from a volcano can determine the shape of the cone.
 - c. Volcanic bombs are blocks of magma so full of sulphur dioxide that they 'explode' when they hit the ground.
 - d. A composite volcano is made up of both lava and ice.
 - e. Lightning can be generated by the friction in volcanic ash.
4. Select which of the following are advantages and which are disadvantages of living near a volcano.
 - a. Possibility of eruption causing the destruction of natural environment
 - b. Fertile soils for agriculture
 - c. Possibility of eruption causing deaths
 - d. Geothermal energy that can be used for heat and electricity
 - e. Natural hot springs for tourism
 - f. Possible damage caused by eruption
 - g. The smell of sulphur
5. True or false? Geothermal energy is not a renewable resource.

6. **Complete** the following statements by filling in the blanks.

Volcanic eruptions both _____ and destroy landscapes. Most eruptions do not occur randomly but occur in a specific area, such as along _____. In some places there is a high number of _____ living near volcanoes. Most of the world's active volcanoes are located near _____ boundaries where subduction is occurring.

ANALYSE AND APPLY

7. **Discuss** how hotspots lead to volcanic activity. Use examples in your analysis.
8. Answer the following questions.
- Explain** what geothermal energy is.
 - Suggest** some of the benefits of using this type of energy.
 - Predict** if this type of energy could be used in Australia. Justify your answer.
9. **Explain** how seismographs can be used to warn of a possible volcanic eruption.

EVALUATE AND COMMUNICATE

10. a. Draw what you imagine Iceland will look like many thousands of years in the future after further rifting.
- b. **Suggest** new names for each of the smaller islands.
- c. **Determine** in which direction, and towards which continent, each island will drift.
- d. **Describe** key changes.

Answers and sample responses for this topic are available online.

LESSON 9.12 Investigating topographic maps — Mount Taranaki, New Zealand

LEARNING INTENTION

By the end of this lesson you should be able to:

- **investigate** Mount Taranaki in New Zealand and **interpret** a topographic map
- **apply** grid references to pinpoint locations on a map.

9.12.1 Mount Taranaki

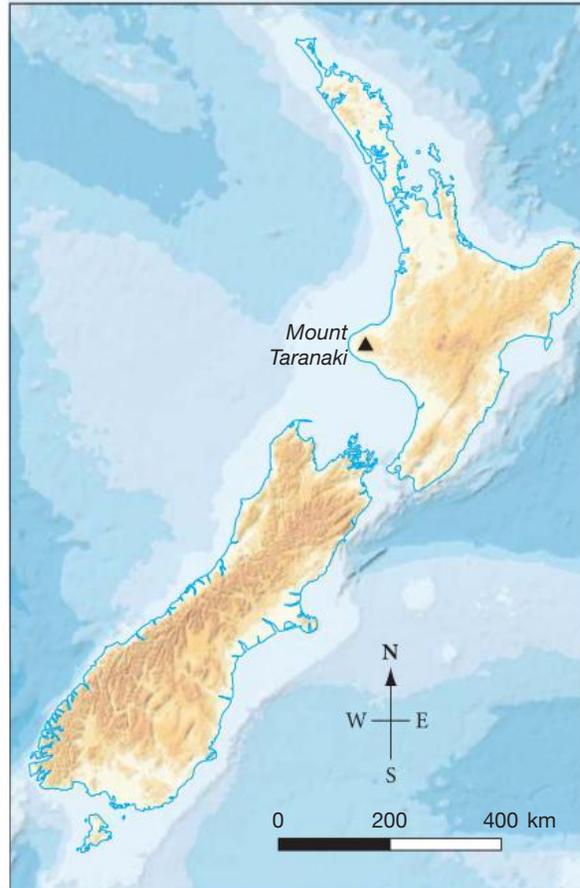
New Zealand's Mount Taranaki is named after the Māori terms *tara*, meaning 'mountain peak', and *ngaki*, meaning 'shining' (because the mountain is covered with snow in winter).

Mount Taranaki is 2518 metres high and is the largest volcano on New Zealand's mainland. It is located in the south-west of the North Island (see **FIGURE 1**).

Mount Taranaki was formed 135 000 years ago by subduction of the Pacific Plate below the Australian Plate. It is a stratovolcano (composite cone) — a conical volcano consisting of layers of pumice, lava, ash and tephra. Mount Taranaki is symmetrical, looking the same on both sides of a central point. It is the only active volcano in a chain in this region. The other volcanoes were once very large but have been eroded over time.

The summit of Mount Taranaki is a lava dome in the middle of a crater that is filled with ice and snow. The mountain is considered likely to erupt again. There are significant potential hazards from lahars (mudflows containing volcanic debris), avalanches and floods. A circular plain of volcanic material surrounding the mountain was formed by lahars (see **FIGURE 3**) and landslides. In the past, some of these flows reached the coast. The volcano's lower flanks are covered in forest and are part of the national park. There is a clear line between the park boundary and surrounding farmland.

FIGURE 1 Location of Mount Taranaki on the North Island of New Zealand



Source: Map drawn by Spatial Vision

SkillBuilder discussion

Questioning and researching

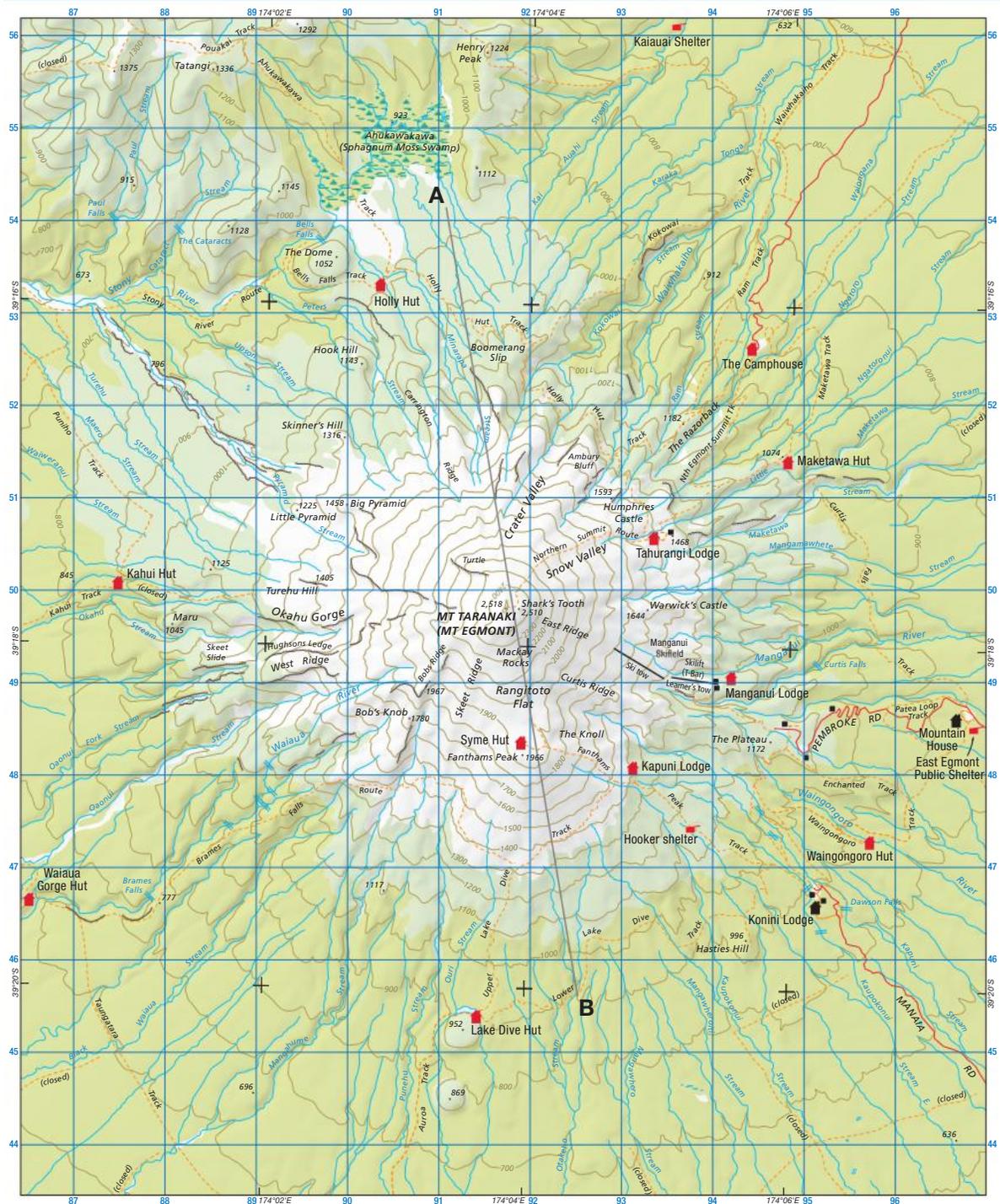
1. Describe evidence from the aerial photo in **FIGURE 2** that shows that the national park has protected forests around the volcano.
2. Predict what may happen to the ice and snow if Mount Taranaki became active again.
3. Explain how previous eruptions have impacted the surrounding area.

FIGURE 2 Aerial photo of Mount Taranaki



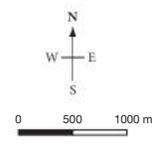


FIGURE 3 Topographic map of Mount Taranaki



Legend

• 121	Spot height	—	Road	—	Index contour	—	Stream	■	Forest	
■	Building	- - -	Track	—	Contour (interval: 100 m)	—	River	■	Scrubland	
■	Hut	—	Ski Tow	—	Cliff	—	Water body	■	Barren / Snow	
■	Lodge						—	Waterfall	■	Swamp
■	Shelter									



Source: LINZ Data Service. License: Creative Commons Attribution 3.0 New Zealand <https://data.linz.govt.nz/license/attribution-3-0-new-zealand/>. Map drawn by Spatial Vision.

FIGURE 4 Mount Taranaki has a near-perfect conical shape.



9.12 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2

■ LEVEL 2

3, 4

■ LEVEL 3

5

1. Mount Taranaki is located in the **east / south-west / north / south-east / south / west** of the **East / South-west / North / South-east / South / West** island of New Zealand.
2. **Explain** how Mount Taranaki formed.
3. Mount Taranaki receives between 3200 millimetres and 6400 millimetres of rainfall each year. **Explain** how this would contribute to the shape of this landform.
4. Refer to **FIGURE 3**.
 - a. **State** the grid reference for the spot height of Mount Taranaki.
 - b. **Calculate** the number of huts and lodges.
 - c. **State** the area reference of the Manganui ski field.
 - d. **State** the highest elevation shown on the map.
 - e. **Name** and give the grid reference of a lodge in which skiers could stay.
 - f. **State** the area reference for the largest portion of swampland.
5.
 - a. Use **FIGURES 2, 3** and **4** to **describe** where you think lava would flow if Mount Taranaki erupted.
 - b. **Describe** the potential changes to the human and natural environment.

Answers and sample responses for this topic are available online.

Background

In this inquiry, you will investigate the recently discovered geomorphological feature known as a supervolcano. In groups of three to four, you will seek to develop a better understanding of supervolcanoes. You will also use critical thinking skills to analyse and interpret information to assess the relative merits of sources of information before submitting a report that will inform the class.

FIGURE 1 Grand Prismatic Spring in Yellowstone National Park



FIGURE 2 Eruption of Mount St Helens



There are estimated to be at least 12 supervolcanoes scattered around the world. Each one has the capacity for a potentially globally significant eruption.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task, you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

Research the world's supervolcanoes. Choose one that you want to investigate further. Focus on the following:

- Where is it located?
- Why is it considered a supervolcano?
- What are its previous historic eruptions?
- Any other interesting facts about your volcano.

(Make sure you are conscious of the sources of your information. Use multiple sources to compile your data and discuss with your teacher ways in which you can verify the reliability of the source.)

Step 2: Analysing

Discover the facts about your supervolcano's previous eruptions. What would a similar-size eruption mean today? **Examine** the effects of an eruption on the local, national and global scale.

Step 3: Evaluating

Compile a series of recommendations that you would make for managing this hazard in the future. You can base this on current monitoring and risk management programs or you can look at what is being done elsewhere in the world and recommend improvements if you think they are required.

Step 4: Communicating and reflecting

Create a report for the rest of the class on your chosen supervolcano. Be creative in the way you want to communicate your information. For instance, you can prepare:

- a mock news report
- a front-/double-page spread for a newspaper
- a radio interview with a group of 'geologists, volcanologists and politicians', assigning roles to different people.

The key is to ensure that your report is both informative and interesting.

FIGURE 3 Hot boiling mud and sulphur springs due to volcanic activity in Wai-O-Tapu, New Zealand



LESSON 9.14 Review

9.14.1 Key knowledge summary

9.2 Different types of landscapes

- Landscapes are shaped by factors such as climate, geographical features and latitude.
- Landscapes are continually changing; they are built by tectonic forces.
- Erosion, deposition and weathering change landscapes, but the rate of change varies.
- Human activity such as deforestation accelerates erosion.

9.3 Coastal landscapes – the role of erosion and deposition

- The coast is the zone between land and sea. Physical processes determine the characteristics of the landscape.
- Waves are created when the wind blows over the ocean; wave size is determined by wind strength and distance travelled.
- Destructive waves create erosional features such as caves, arches and stacks.
- Constructive waves create depositional features such as beaches, spits and lagoons.
- Longshore drift moves sand along a beach in the direction of the prevailing waves.

9.4 Rivers shaping landscapes

- Rivers sculpt landscapes through erosion, transportation and deposition.
- Rivers can be perennial (with consistent flow all year) or intermittent (with inconsistent flow).
- Rivers consist of three sections – upper, middle and lower. Different processes and landforms are found within each section.

9.5 Australian landforms

- Australia is an ancient landmass that has undergone many changes over millions of years.
- Tectonic forces have uplifted the land, creating mountain ranges.
- Weathering, erosion and deposition have worn away and sculptured the landscape.

9.6 Rainforests, grasslands and deserts

- Rainforests are areas of extremely high rainfall.
- Rainforests regulate climate, produce oxygen and are the source of many foods and medicines.
- Grasslands are transitional landscapes, generally located between forests and deserts.
- Aboriginal communities use fire to maintain grasslands in northern Australia.
- Deserts are areas of low rainfall; they can be hot or cold. Australia only has hot deserts.
- Topography and latitude play a role in determining where deserts are located.

9.7 Underground landscapes

- Karst landscapes are found all over the world, predominantly in tropical regions.
- Karst landscapes form where slightly acidic water filters through soluble bedrock, such as limestone, creating underground hollows and caves.
- The largest arid limestone karst cave system is located on Australia's Nullarbor Plain.

9.8 The cultural and spiritual significance of landscapes

- Aboriginal and Torres Strait Islander Peoples of Australia have been in Australia for over 65 000 years and have a close connection to the land.
- The Australian landscape is culturally significant to Aboriginal and Torres Strait Islander Peoples; their beliefs regarding the land conflicted with those of European settlers.
- Shell middens provide archaeological evidence of Aboriginal and Torres Strait Islander Peoples' activity in coastal environments and a physical link to their culture and history.

9.9 Plate tectonics

- The Earth is made up of plates that are slowly moving; this movement is driven by convection currents in the Earth's mantle.
- Some plates converge, some diverge, and others slide past one another; most earthquake and volcanic activity occurs on the edge of plate boundaries.
- Hotspots create volcanic islands and landmasses around the world.
- The Pacific Ring of Fire is the world's most active tectonic region.

9.10 Earthquakes and tsunamis

- An earthquake is the sudden shaking of the ground caused by the passage of seismic waves through the Earth's crust.
- The focus of an earthquake is the place underground where movement takes place; the epicentre is the spot on the Earth's surface directly above the focus.
- Earthquakes generate both primary and secondary waves that radiate out from the focus.
- Tsunamis are giant waves caused by earthquakes or volcanic eruptions under the sea.
- The 2011 Japanese tsunami was the result of a massive earthquake (magnitude 9.0 on the Richter scale); waves were over 40 metres in height.
- Earthquakes and tsunamis impact both people and the environment; ground liquification causes the ground to behave like a liquid.

9.11 Volcanoes

- Volcanoes are formed when molten magma in the Earth's mantle is forced through an opening in the Earth's surface.
- Volcanoes can be formed in rift valleys, near convergent plate boundaries and over hotspots.
- A pyroclastic flow is a superheated avalanche of rock, ash and lava that rushes down the mountain.
- A lahar is a flow of mud and ash that occurs when pyroclastic flows melt ice and snow, and mix with rocks and stones.
- Large numbers of people live near volcanoes because of the fertile soils, ore deposits and geothermal energy.

9.12 Investigating topographic maps — Mount Taranaki, New Zealand

- Mount Taranaki is the largest volcano on New Zealand's mainland, on the North Island.
- Mount Taranaki is a dormant stratovolcano that is likely to erupt in the future.

9.13 Inquiry: Supervolcano report

- What is a supervolcano?
- Where are supervolcanoes located?
- What could happen if a supervolcano erupted?

9.14.2 Key terms

aquifer a body of permeable rock below the Earth's surface that contains water, known as groundwater

backwash the movement of water from a broken wave as it runs down a beach, returning to the ocean

billabong a U-shaped body of water created when a wide meander is cut off from the main channel of a river after it changes its course. Also known as an oxbow lake.

constructive waves waves that deposit sand on the beach

convection currents currents created when a fluid is heated, making it less dense and causing it to rise through surrounding fluid and sink if it is cooled; a steady source of heat can start a continuous current flow

converging plate a tectonic boundary where two plates are moving towards each other

cusped spit a pointed landform made of sand or gravel that forms where waves hit the shore from two directions

deposition the laying down of material carried by rivers, wind, ice and ocean currents

destructive wave a large powerful storm wave that has a strong backwash

divergent plate a tectonic boundary where two plates are moving away from each other and new continental crust is forming from magma that rises to the Earth's surface between the two

downstream nearer the mouth of a river, or going in the same direction as the current

drainage basin an area of land that feeds a river with water, or the whole area of land that is drained by a river and its tributaries

ecosystems interconnected community of plants, animals and other organisms that depend on each other and on the non-living things in their environment

epicentre the point on the Earth's surface directly above the focus of an earthquake

erosion the wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity

estuary the wide part of a river at the place where it joins the sea

fault an area on the Earth's surface that has a fracture; a fault lies at the major boundaries between Earth's tectonic plates

fault plain a surface along which the Earth's crust has broken and moved during an earthquake

fetch the distance over which the wind blows across the surface of water. A long fetch results in larger, more powerful waves, whereas a short fetch results in smaller waves.

floodplain an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding

focus the point where the sudden movement of an earthquake begins

geothermal energy energy derived from the heat in the Earth's interior

geyser a hot spring that intermittently erupts, sending water and steam into the air due to underground heat and pressure

glaciers large, slow-moving rivers of ice formed by the accumulation and compression of snow. They are found in mountain and polar regions.

groundwater water stored underground in spaces between rocks and soil

hotspot an area on the Earth's surface where the crust is quite thin and volcanic activity can sometimes occur, even though it is not at a plate margin

inselberg an isolated hill, knob, ridge, outcrop or small mountain that rises sharply from the surrounding landscape

intermittent describes a stream that does not always flow

landslide a rapid movement of rocks, soil and vegetation down a slope, sometimes caused by an earthquake or by excessive rain

liquefaction transformation of soil into a fluid, which occurs when vibrations created by an earthquake, or water pressure in a soil mass, cause the soil particles to lose contact with one another and become unstable; for this to happen, the spaces between soil particles must be saturated or near-saturated

lithosphere the crust and upper mantle of the Earth

longshore drift a process by which material is moved along a beach in the same direction as the prevailing wind

mantle the layer of the Earth between the crust and the core

meanders a winding curve or bend in a river

microclimate specific atmospheric conditions within a small area

oxbow lake a U-shaped body of water created when a wide meander is cut off from the main channel of a river after it changes its course. In Australia it is referred to as a billabong.

Pangaea the name given to all the landmass of the Earth before it split into Laurasia and Gondwana, which over time became the continents we know today

peninsula land jutting out into the sea

percolate filter through porous material such as soil

perennial describes a stream that flows all year

permafrost a layer beneath the surface of the soil where the ground is permanently frozen

physical processes continuing and naturally occurring actions such as wind and rain

plateau an extensive area of flat land that is higher than the land around it. Plateaus are sometimes referred to as tablelands.

prevailing wind the main direction from which the wind blows

primary wave also known as a P-wave; the first waves to hit an area during an earthquake, which cause a sudden jolt

rift zone a large area of the Earth in which plates of the Earth's crust are moving away from each other, forming an extensive system of fractures and faults

river delta a landform created by deposition of sediment that is carried by a river as the flow leaves its mouth and enters slower-moving or stagnant water. It can take three main shapes: fan shaped, arrow shaped and bird-foot shaped.

secondary wave a type of seismic wave that moves through the Earth by shaking the ground side to side or up and down, and travels slower than primary waves

sediment material carried by water

seismic waves a wave of energy that travels through the Earth as a result of an earthquake, explosion or volcanic eruption

shell middens Australian archaeological sites where the debris associated with eating shellfish and similar foods has accumulated over time

soluble able to be dissolved in water

stalactites icicle-shaped formations that hang from the roof of caves, made from minerals left by dripping water

stalagmites cone-shaped formations that grow from the cave floor, formed by minerals from dripping water

subduction when two tectonic plates converge, one will be forced under the other and into the mantle. The other plate will be pushed up, forming mountains.

surface wave a seismic wave that travels along the Earth's surface, causing the most ground movement and damage during an earthquake

swash the movement of water in a wave as it breaks onto a beach

tectonic plate one of the slow-moving plates that make up the Earth's crust. Volcanoes and earthquakes often occur at the edges of plates.

tombolo landform created when a sand spit joins one island to another or the mainland

transport the movement of eroded materials to a new location by elements such as wind and water

volcanic loam volcanic soil composed mostly of basalt, which has developed a crumbly mixture

watershed an area or ridge of land that separates waters flowing to different rivers

weathering the breaking down of bare rock (mainly by water freezing and cooling as a result of temperature change) and the effects of climate

9.14.3 Reflection

Revisit the inquiry question posed in the Overview:

How do human and natural processes shape environments and what impacts does this have on the way people manage changing landscapes?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

learn on



Post-test

Online post-test



eWorkbooks

Customisable worksheets for this topic
Reflection



Digital document

Key terms glossary

9.14 Review exercise

Learning pathways

■ LEVEL 1

1, 3, 5, 6, 11

■ LEVEL 2

2, 4, 7, 8, 12

■ LEVEL 3

9, 10, 13, 14, 15

REMEMBER AND UNDERSTAND

- Identify the statement that best explains how rivers and streams made physical changes to Australia's landmass.
 - Through the process of folding, faulting and uplifting
 - By transporting materials to new areas, creating floodplains and coastal landscapes
 - By forming the Great Dividing Range
 - None of the above
- Landscapes are in a state of continual change. Identify the two natural processes powered by water that are most responsible for continually changing landscapes.
 - Erosion and weathering
 - Erosion and deposition
 - Transportation and deposition
 - Transportation and calcification
- Identify the term used to describe the laying down of material carried by rivers, wind, ice and ocean currents or waves.
 - Erosion
 - Sediment
 - Transport
 - Deposition
- Explain the importance of fire in maintaining savanna grasslands by combining two of the following statements.
 - It clears out the undergrowth and encourages new plant growth.
 - It creates new habitats for animals.
 - It prevents trees from taking over, as saplings are burnt in the process.
 - The soil becomes more fertile.
- A cave is formed by the process of:
 - erosion.
 - deposition.
 - transpiration.
 - condensation.
- Identify the term that describes the movement of water in a wave as it breaks onto a beach.
 - Longshore drift
 - Swash
 - Watershed
 - Tributary
- Despite the risks of flooding, a high level of agricultural activity is often found in floodplains. Besides the availability of water, identify another reason that explains this pattern.
 - High human populations
 - High levels of nutrients in soils
 - High degree of sunlight
 - High diversity of plants and animals
- While volcanoes can bring death and destruction, they can also benefit people. From the list, identify three benefits that volcanoes bring to people.
 - Fertile soils from the gradual breakdown of mineral-rich lava
 - Ash build-up in rivers
 - Geothermal energy
 - Pyroclastic flows
 - Spectacular scenery and tourist destinations

9. The epicentre of an earthquake is:
- A. the point below the Earth's surface where an earthquake occurs.
 - B. the point on the Earth's surface directly above the focus of the earthquake.
 - C. the area affected directly by an earthquake.
 - D. the centre of the Earth.
10. Volcanic loam is:
- A. the plume of smoke and ash arising from a volcano.
 - B. the fiery centre of a volcano.
 - C. a volcanic soil.
 - D. hot molten ash created by a volcano.

ANALYSE AND APPLY

11. **Distinguish** between the terms *erosion*, *deposition* and *transportation*.
12. **Explain** how karst landscapes are formed.
13. **Identify** three factors that influence the formation of landscapes.
14. a. **Define** and **explain** *continental drift* and *plate tectonics*. Use your own sketched and labelled diagrams to help with your explanation.
- b. **Describe** the relationship between the location of earthquakes and volcanoes and plate tectonics. Choose three examples from different places for your explanation.

EVALUATE AND COMMUNICATE

15. 'If people are well prepared for earthquakes and volcanic eruptions, there will be fewer deaths and injuries and less destruction and damage.' **Outline** your opinion about this statement. **Justify** by using some examples.

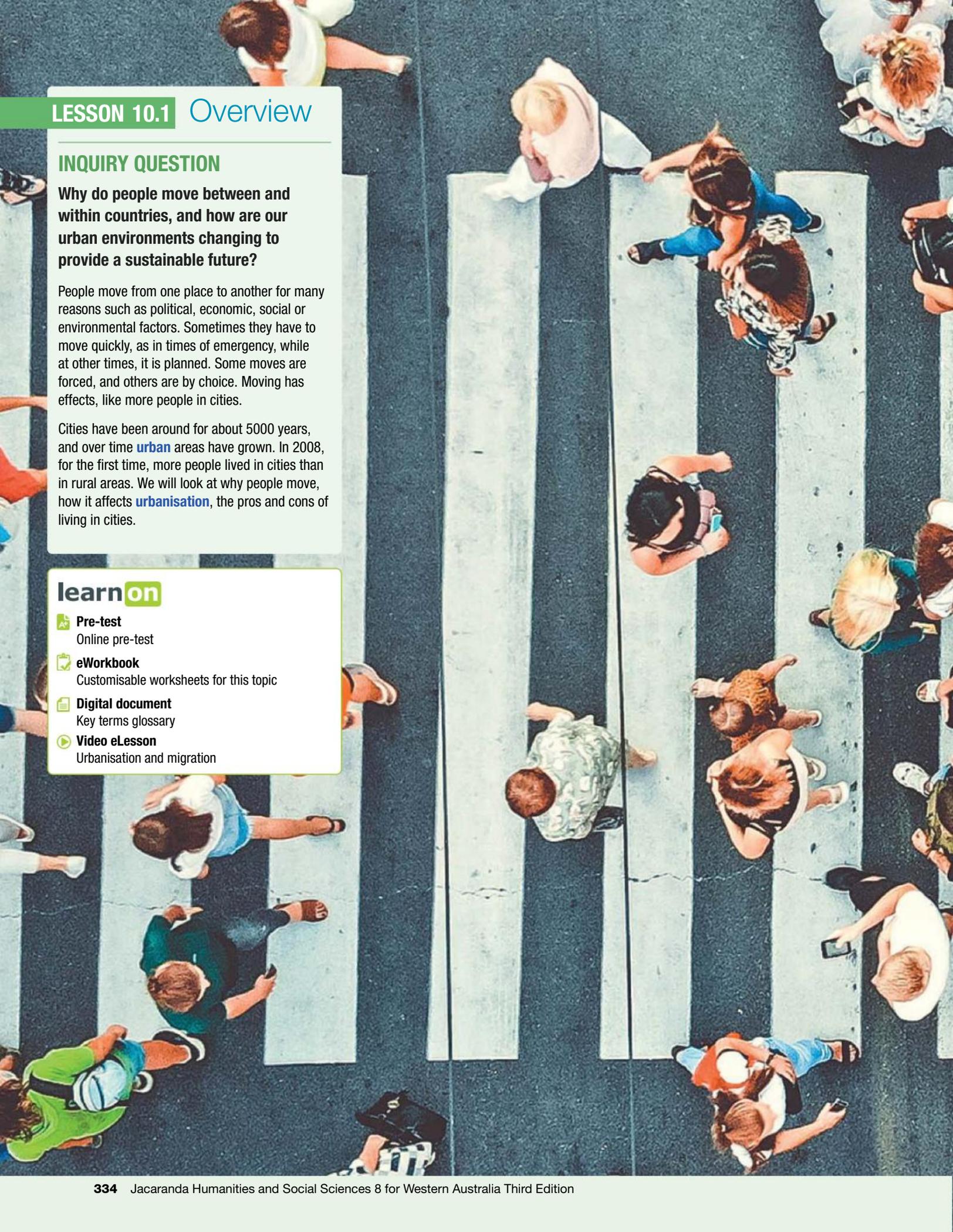
Answers and sample responses for this topic are available online.

10 Changing nations

LESSON SEQUENCE

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LESSON 10.1 Overview

INQUIRY QUESTION

Why do people move between and within countries, and how are our urban environments changing to provide a sustainable future?

People move from one place to another for many reasons such as political, economic, social or environmental factors. Sometimes they have to move quickly, as in times of emergency, while at other times, it is planned. Some moves are forced, and others are by choice. Moving has effects, like more people in cities.

Cities have been around for about 5000 years, and over time **urban** areas have grown. In 2008, for the first time, more people lived in cities than in rural areas. We will look at why people move, how it affects **urbanisation**, the pros and cons of living in cities.

learn on

-  **Pre-test**
Online pre-test
-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital document**
Key terms glossary
-  **Video eLesson**
Urbanisation and migration



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

LESSON 10.2 What is migration?

LEARNING INTENTION

By the end of this lesson, you should be able to:

- **define** key terms related to the concept of migration
- **identify** different types of migration
- **understand** the difference between push and pull factors for migration.

Tune in

A range of factors influence the decision of people to leave one place to live in another. Some factors may be more significant than others.

FIGURE 1 Millions of people every year flee their homes in search of a better life.



1. Discuss reasons why people may try to make a dangerous journey across the ocean on a small boat like the one in FIGURE 1.
2. What are the risks associated with a journey like this?
3. Discuss the issues that the people in FIGURE 1 would face once they arrive in a new country.

10.2.1 How do we define migration?

When people move from one place to settle in another, this is known as **migration**. Types of migration can be categorised by time, location and degree of choice. The table below outlines some examples.

TABLE 1 Types of migration

Duration	Location	Degree of choice
<ul style="list-style-type: none">• <i>Permanent</i> — migrants choose to move and remain in their new location indefinitely.• <i>Temporary</i> — migrants may choose to move again, or even return to their original location.• <i>Seasonal or cyclical</i> — migrants move for a specific period of time such as for employment or due to climatic reasons.	<ul style="list-style-type: none">• <i>International</i> — migrants choose to move from one country to another.• <i>Internal</i> — migrants choose to move from one place within a country to another.	<ul style="list-style-type: none">• <i>Forced</i> — migrants have no option but to move, due to conflict, natural disasters, etc.• <i>Voluntary</i> — migrants freely choose to move for reasons that benefit them.

For every individual migrant, their personal migration story will link to each of the categories outlined. For example, comedian, actor, artist and author Anh Do fled Vietnam with his family as a refugee in 1980. They eventually settled in Australia, where Anh Do has lived, studied and worked since. Therefore his migration was:

- permanent (as he has remained in Australia ever since)
- international (as he moved from one country to another)
- forced (as he was a refugee).

10.2.2 What do we mean by push and pull factors?

When deciding to move from one place to another, migrants are influenced by a range of push and **pull factors**.

TABLE 2 An overview of push and pull factors

Factor type	Description
Push factors	Characteristics, qualities or attributes of a place that are unfavourable or negative, and make people want to move away from it
Pull factors	Characteristics, qualities or attributes of a place that are positive and attractive, and encourage people to move there

Push and pull factors are key concepts in migration studies. **Push factors** are conditions that drive people to leave their home country, such as economic hardship, political instability, war or lack of opportunities. Pull factors, on the other hand, are the attractions of a new location, like better job prospects, political stability, improved living conditions or family reunification.

SkillBuilder discussion

Communicating and reflecting

1. Discuss with a partner which of the reasons provided in **FIGURE 2** you think would be the most important reason for migrants to come to Australia. List them all in order from most important to least important.
2. Justify your response for the most important and the least important reason migrants are 'pulled' to Australia.

FIGURE 2 These images show some pull factors. These include (a) religious tolerance, (b) improved healthcare, (c) job opportunities, (d) family links, (e) better housing and infrastructure, (f) political freedom and (g) better educational opportunities.



10.2 SkillBuilder activity ANALYSING

1. As a class or in small groups, **create** a survey to gather migration information from your class, your year level, your whole school or your wider community.
Construct questions that address:
 - the categories of migration types
 - whether the migration was international (between countries) or internal (within a country)
 - the place of origin
 - the place of destination
 - push factors
 - pull factors.
2. After gathering your data, decide how to **outline** your findings. You may wish to consider creating maps, graphs, or tables, and incorporating the use of relevant images.

10.2 Exercise

learn **on**

Learning pathways

■ LEVEL 1

1, 2, 5

■ LEVEL 2

3, 4, 6

■ LEVEL 3

7, 8

REMEMBER AND UNDERSTAND

1. Anh Do's family migrated internationally. **Identify** their country of origin.
 - A. Cambodia
 - B. Vietnam
 - C. Laos
 - D. Indonesia
2. Are the following statements true or false?
 - a. The decision to migrate was forced on Anh Do and his family. This means that they freely chose to move for reasons that benefitted them.
 - b. War is a pull factor.
 - c. Religious freedom is a push factor.
 - d. Desertification is a push factor.
 - e. Internal migration is when migrants choose to move from one place within a country to another.
3. Seasonal migrants move for a specific period of time for _____ or due to _____ reasons.
4. **List** two examples of push factors.
5. **List** two examples of pull factors.
6. **Explain** the difference between forced and voluntary migration. Provide an example in your response.

ANALYSE AND APPLY

7. **Distinguish** between push and pull factors.
8. 'Seeking greater educational opportunities is a major reason for internal migration in many nations.'
Determine whether this statement is True or False. **Justify** your answer.
9. Imagine you live in a rural village in India with no work. **Create** a list of all the possible attractions of moving to an urban area.

EVALUATE AND COMMUNICATE

10. **Discuss** the issues that may make you leave the country that you and your family have grown up in. **Evaluate** why people would make such a difficult decision.

Answers and sample responses for this topic are available online.

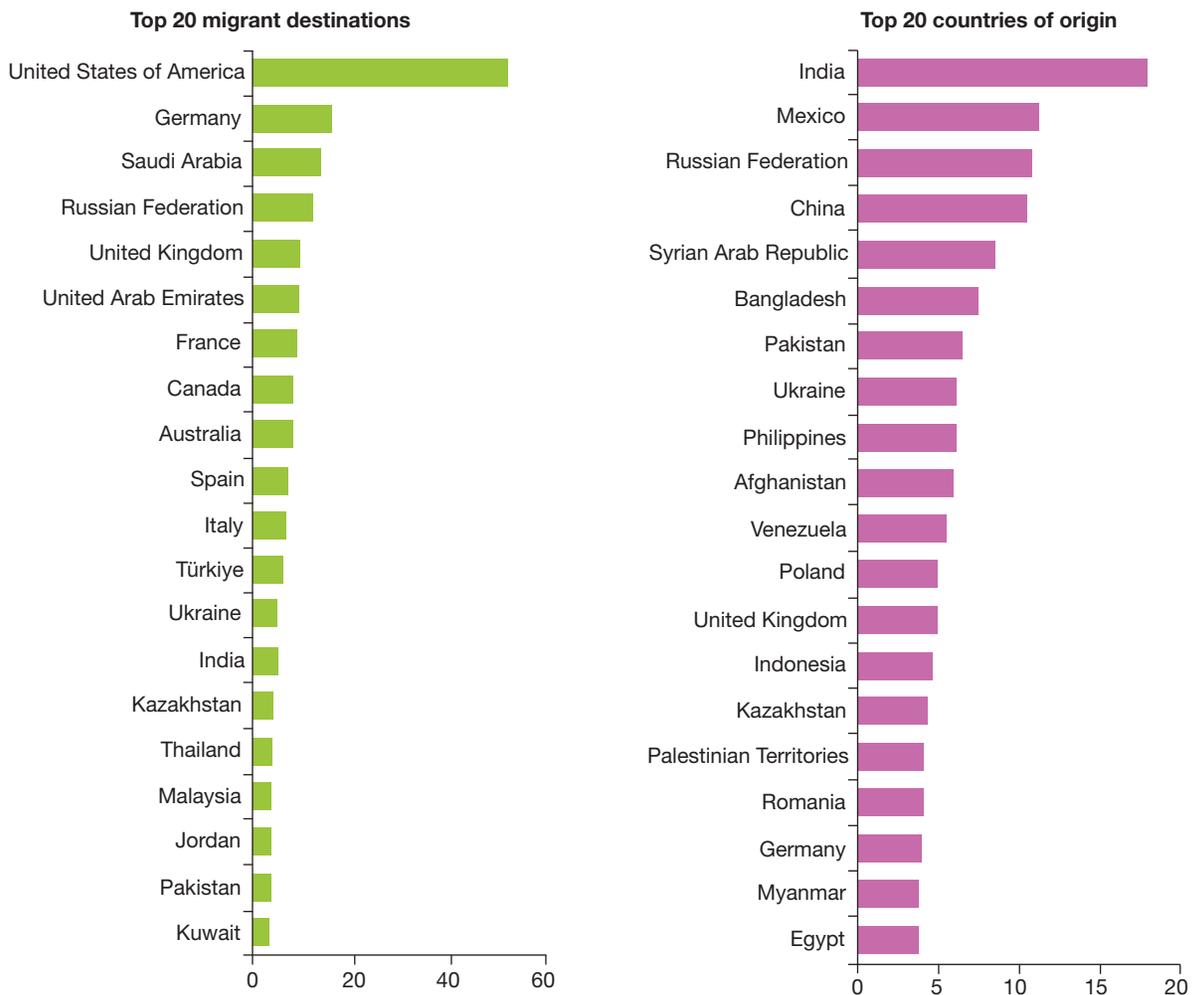
LEARNING INTENTION

By the end of this lesson you should be able to **describe** patterns of and reasons for international migration and the effects of migration on Australia.

Tune in

The International Organization for Migration (IOM) is a United Nations related organisation. In addition to providing services and advice to governments and migrants, it also tracks migration data. Every year it releases a report on migration. **FIGURE 1** lists the top 20 destinations of international migrants and countries of origin.

FIGURE 1 Top 20 destinations (left) and origins (right) of international migrants in 2020 (millions)



Source: UN DESA, 2021a

With a partner, consider the figure and use the thinking routine of ‘See, Think, Wonder’ to discuss your ideas and then share them with the class.

- **See** — observe a piece of information provided by the figure.
- **Think** — what does this information make you think about migration destinations or origins?
- **Wonder** — what question could you ask about this information? What are you curious to know more about?

10.3.1 What is the difference between an emigrant and an immigrant?

When people move from one country to live in another, they are considered to be both **emigrants** and **immigrants**. They are emigrating, or ‘exiting’ from, their country of origin, and immigrating, or ‘moving into’, their destination country. For example, a person moving from Thailand to live in Australia would be emigrating *from* Thailand and immigrating *to* Australia. In this scenario, Thailand is the country of origin (sometimes called the donor country) while Australia is the destination country (sometimes called the host country).

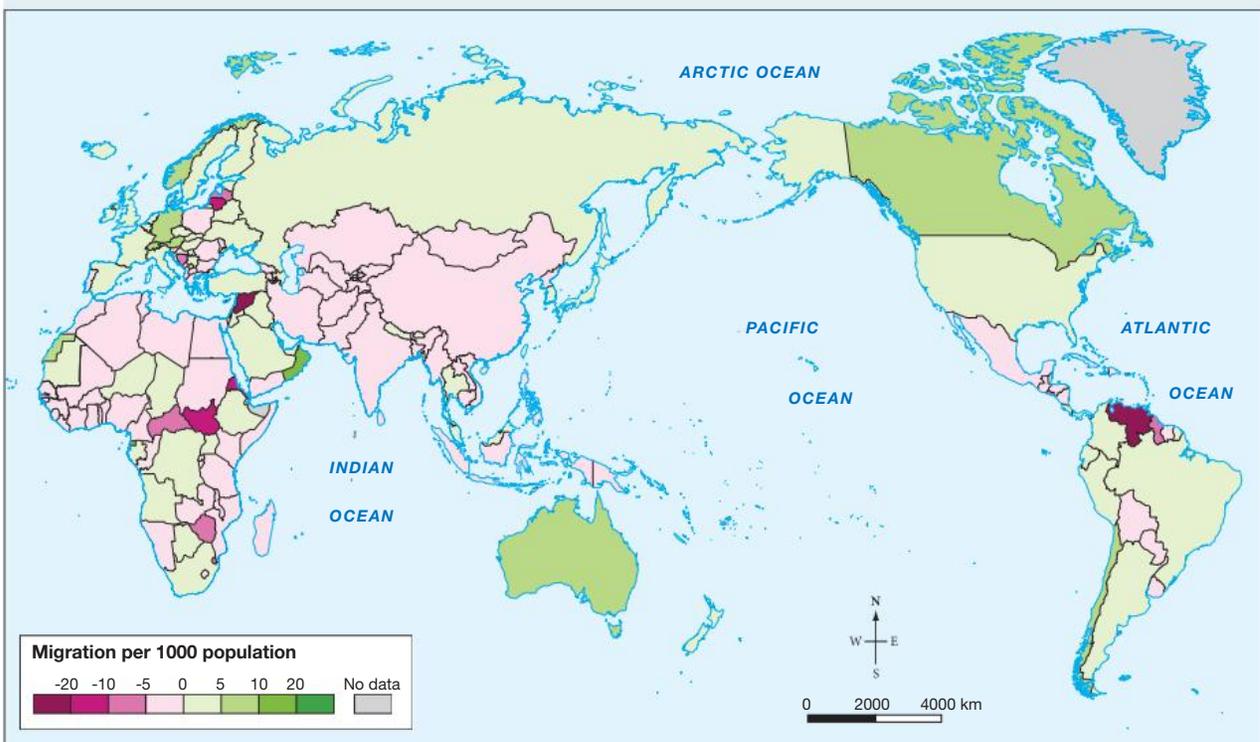
10.3.2 Where are people moving to and from internationally?

FIGURE 1 lists the top 20 destinations of international migrants as well as the top 20 countries of origin. In 2020, the United States of America was the most popular destination for international migrants, while the highest number of migrants were coming from India. Australia was a top ten destination for migrants in 2020. Some countries feature on both lists.

Annual net migration takes into account the difference between the number of people who move to a country and the number of people who leave it over the course of a year. **FIGURE 2** provides a global picture of annual net migration from 2015 to 2020. Countries in green are those that received more immigrants (people arriving) than they had emigrants (people leaving), whereas the opposite occurred in countries that are purple. If more people arrive than leave, this is called positive net migration; if more people leave than arrive, this is called negative net migration.



FIGURE 2 Annual Net Migration rate, 2015–20



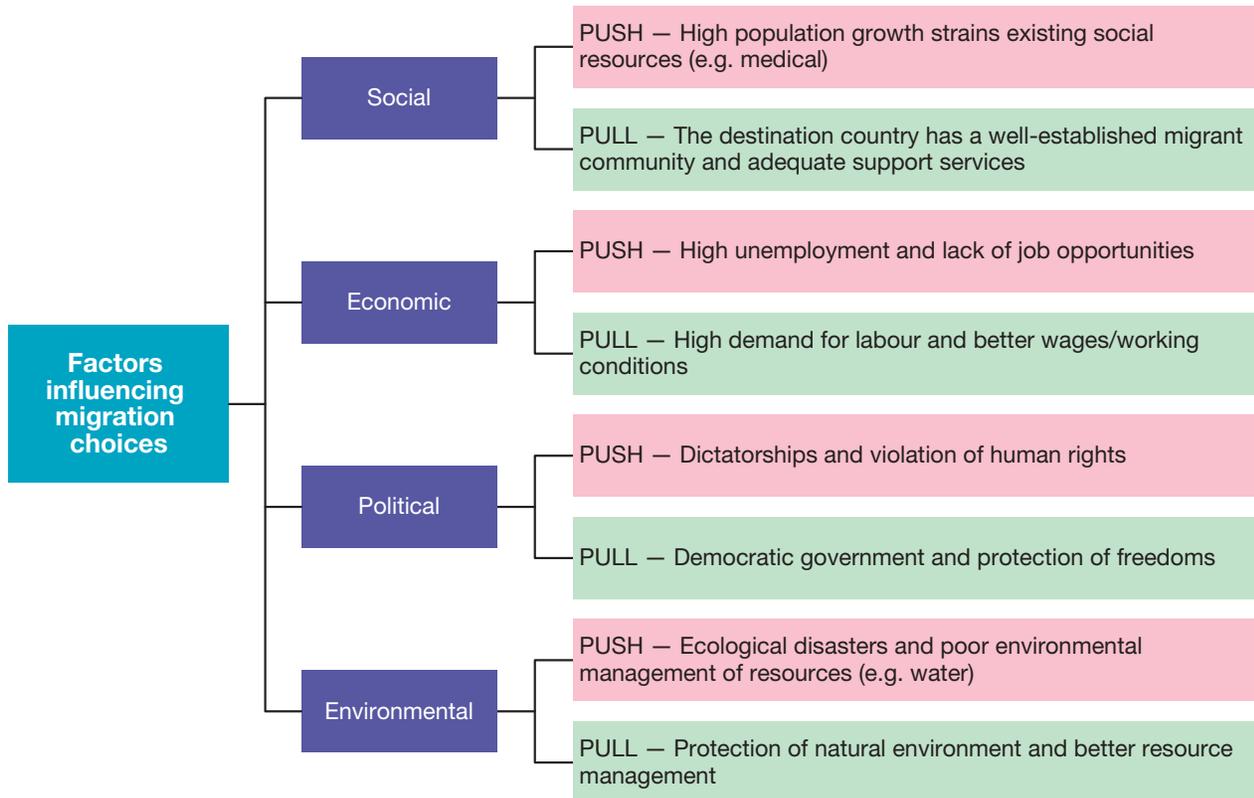
Source: Based on data from United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, Online Edition. Rev. 1. Map redrawn by Spatial Vision.

10.3.3 Push and pull factors for international migration

There are a range of push and pull factors that influence why people choose to move and where they choose to move to, and these can be broadly categorised as social, economic, political or environmental reasons (see **FIGURE 3**).



FIGURE 3 Factors influencing migration choices



SkillBuilder discussion

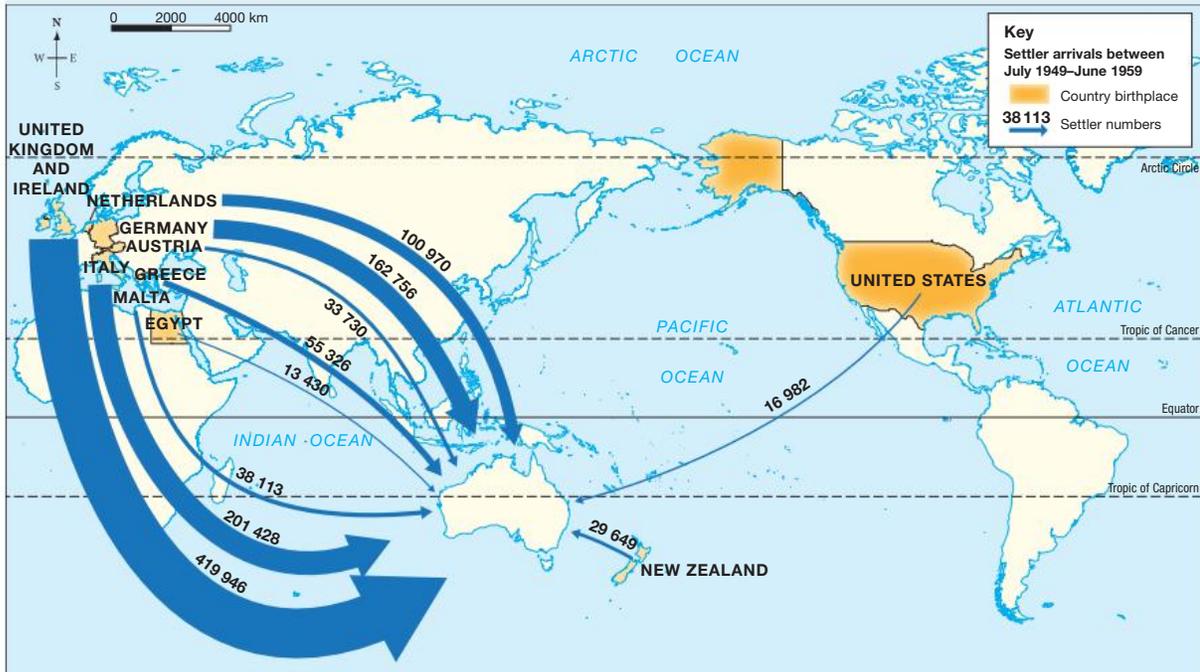
Analysing

1. Using the information in **FIGURES 2** and **3**, discuss why the USA is the world's largest migrant destination.
2. Which of the four factors is most likely to lead to forced migration?
3. Which of the four factors is most likely to explain migration to Australia?

10.3.4 Where are international migrants to Australia from?

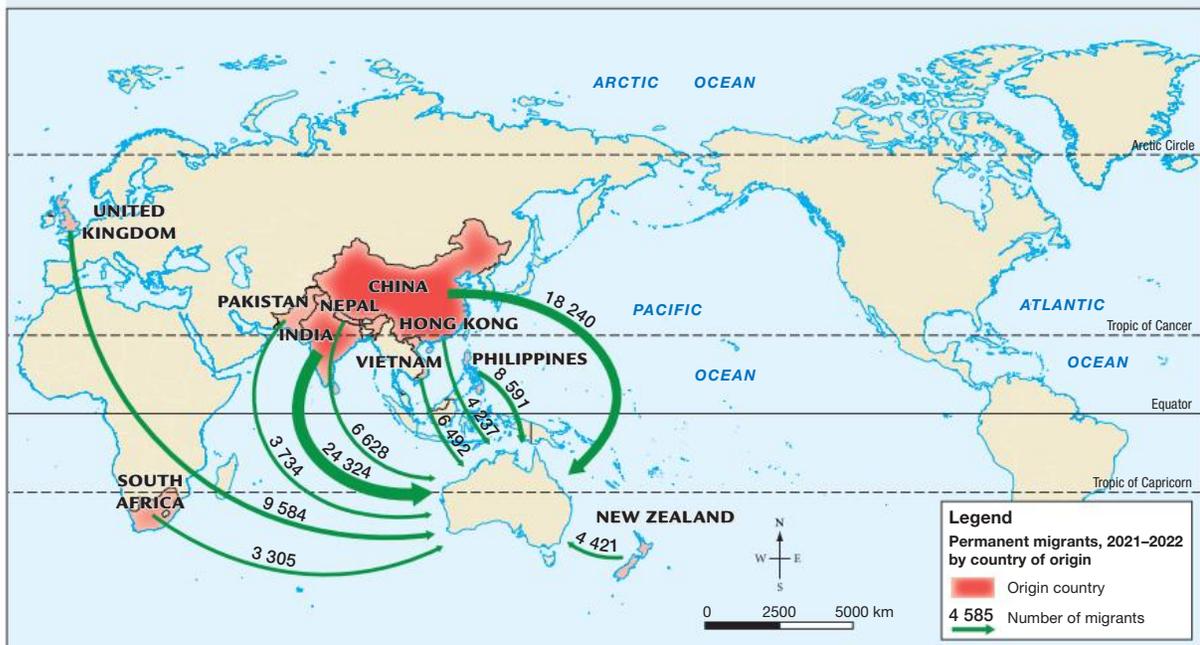
Between 1851 and 1861, more than 600 000 people came to Australia. While the majority were from Britain and Ireland, 60 000 came from continental Europe, 42 000 from China, 10 000 from the United States and just over 5000 from New Zealand and the South Pacific. However, since 1975, with the abolition of the white Australia policy that limited immigration to Europeans and people from the British Commonwealth nations, the country has attracted more immigrants from Asia (see **FIGURES 4** and **5** and **TABLE 1**).

FIGURE 4 Origins of Australia's migrants, 1949–59



Source: Map drawn by Spatial Vision

FIGURE 5 Settler arrivals by country of birth according to the 2021 census



Source: Australian Government, Department of Home Affairs

SkillBuilder discussion

Analysing

1. Identify the two nations from which the most migrants arrived in Australia in 2021–2022.
2. Comparing **FIGURES 4** and **5**, describe the change in the countries of origin for the majority of Australia's migrants.
3. Discuss why you think this change has occurred.

About one-third of the population of each of our large cities was born overseas. Migrants from certain countries tend to be attracted to certain Australian states and territories more than others (see **TABLE 1**).

TABLE 1 Top five countries of birth by state or territory in 2021

ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA
Australia 317 600	Australia 5 586 710	Australia 188 910	Australia 3 952 050	Australia 1 350 180	Australia 474 920	Australia 4 475 230	Australia 1 810 460
India 17 510	China 261 330	Philippines 7320	New Zealand 229 920	England 98 770	England 20 420	India 272 250	England 211 730
England 13 410	England 240 530	India 5860	England 201 750	India 47 190	China 7440	China 182 140	New Zealand 85 590
China 12 720	India 219 230	England 5790	India 76 870	China 27 470	India 6530	England 181 440	India 66 550
Nepal 5690	New Zealand 128 460	New Zealand 4840	China 60 350	Vietnam 18 150	Nepal 6480	New Zealand 108 640	South Africa 49 300

Source: ABS 2024

10.3.5 Why have people migrated to Australia?

Australia is a land of **migrants**. In a way, all non-Indigenous Australians are migrants — at some stage in the past, perhaps as long ago as European settlement, our ancestors came to this country to live. In 2024, nearly one-third of Australia’s population was born overseas.

Since the earliest times, people have moved from one part of the world to another in search of places to live. Migrants have come to Australia for many reasons (see **FIGURE 6**).

In addition, Australia is interconnected to Asia, particularly through trade and geographic proximity. This makes Australia appealing as a destination country for migrants from China, India, Vietnam and other Asian countries. The shared historical connections and/or common language may increase the appeal of Australia as a destination country for migrants from other English-speaking countries, such as England and New Zealand.

10.3.6 What are the effects of international migration to Australia?

International migration to Australia has significant social, economic and cultural effects, shaping the country’s demographic landscape and influencing its growth and development.

Social effects

Migration has greatly increased Australia’s population, growing from 7 million after World War II to over 27 million now. This growth is due to both migrants arriving and higher birth rates.

Migrants have enriched Australian society, culture and economy. Many communities organise festivals and share their foods, languages, music, customs, art and dance.

Australia is very multicultural, with people from over 200 countries. It’s important to respect and support everyone’s right to their own culture, language and religion.

FIGURE 6 Reasons for immigration to Australia

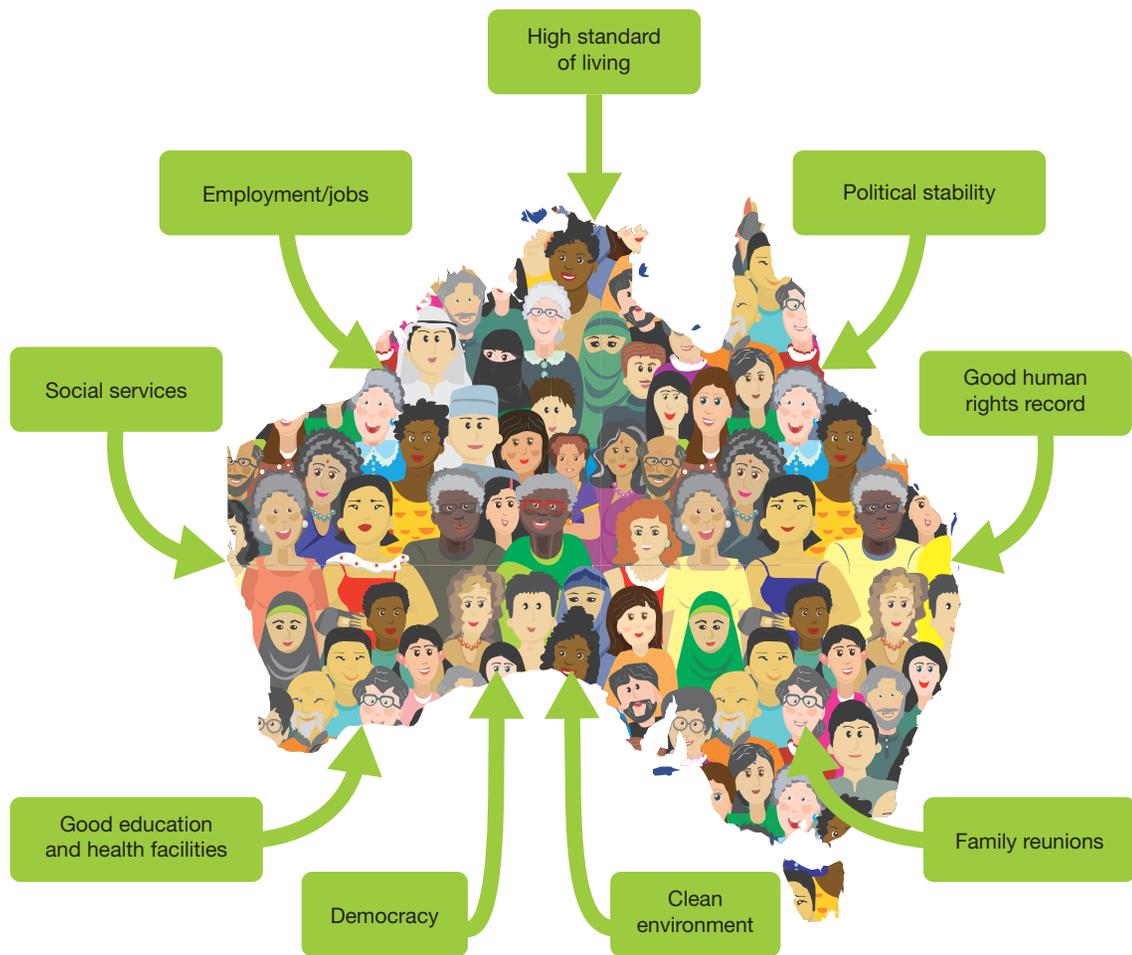
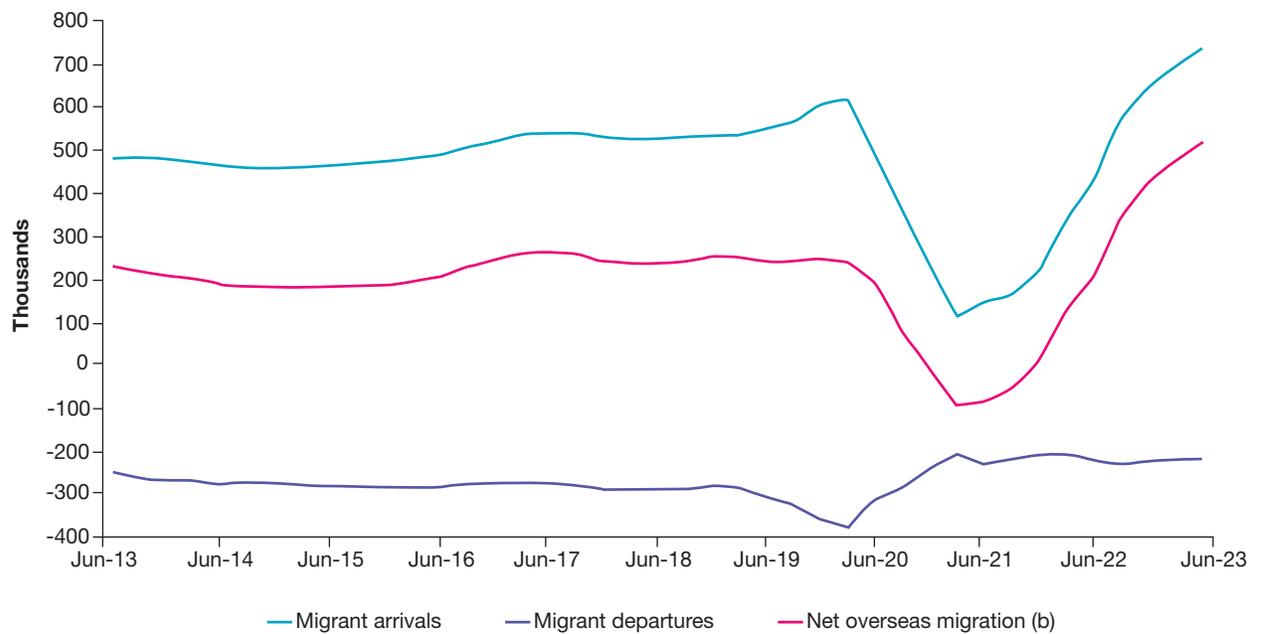


FIGURE 7 Overseas migration — Australia

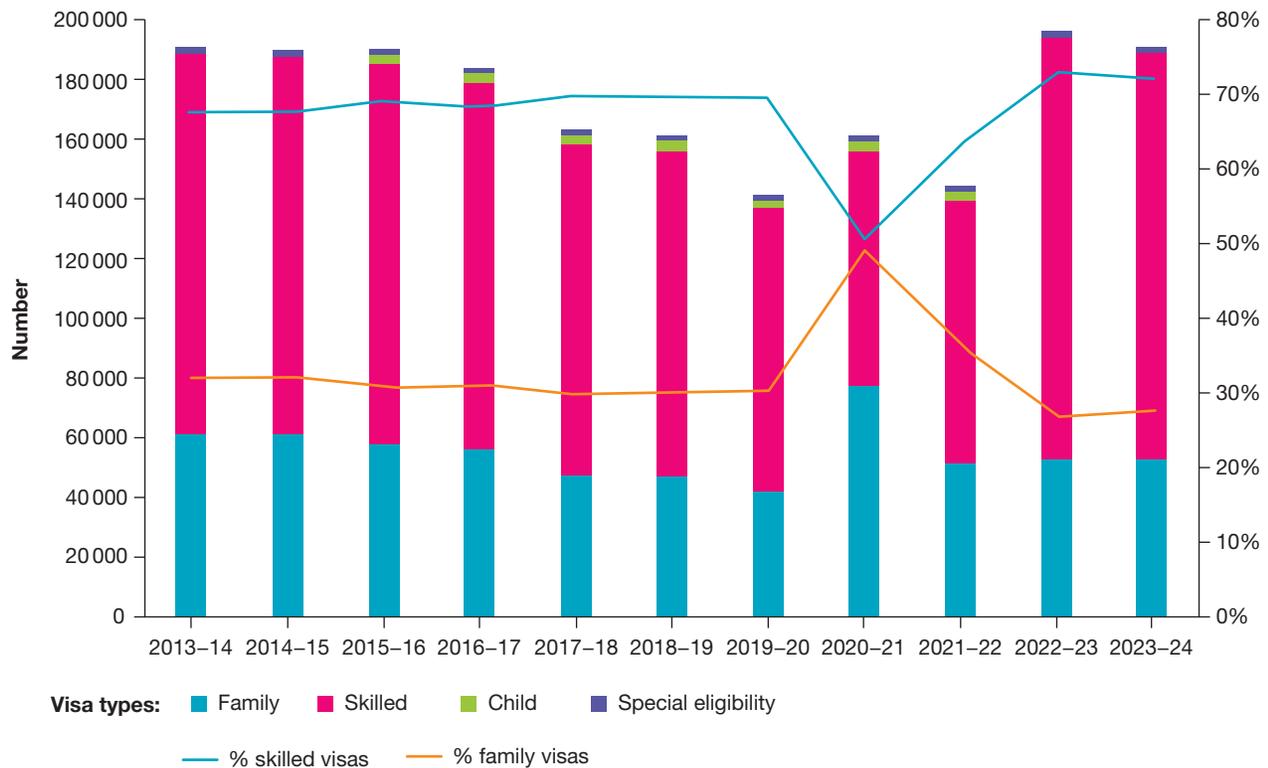


Economic effects

An increased population also means a greater demand for goods and services, which stimulates the economy. Migrants need food, housing, education and health services, and their taxes and spending allow businesses to expand. Apart from labour and capital (money), migrants also bring many skills to Australia. Significant numbers of migrants come as skilled migrants, meaning they have in-demand qualifications or professions (see **FIGURE 8**).

Migrants generate more in taxes than they consume in benefits and government goods and services. As a result, migrants as a whole contribute more financially than they take from society.

FIGURE 8 Visa types for migrants to Australia, 2013–24



Source: Department of Immigration

Environmental effects

In the past, people argued that immigrants put pressures on Australia's environment and resources by increasing our population and water, energy and other requirements. However, today many people believe that Australia's environmental problems are not caused by migration and population increase, but by inadequate planning and management.

10.3 SkillBuilder activity

EVALUATING, COMMUNICATING AND REFLECTING

1. Refer to **FIGURE 1** and write the top ten destination countries and the top ten origin countries (note any countries that appear on both lists).
2. **Select** one colour to represent the destination countries.
3. **Select** a different colour to represent the origin countries.
4. **Select** a third colour for any country that appears on both lists.
5. On a blank map of the world (ideally A3 in size), use your chosen colours and highlight the countries from your list. Use a political map in an atlas to assist you in locating each country.

6. On your completed map, remember to include all BOLTSS.
 - a. *Legend* — tell your reader what colours are used to represent the different categories of countries.
 - b. *Title* — this should be specific and informative. The title of the graph your sourced your data from is a good starting point.
 - c. *Source* — this should tell your reader where you got your information from (therefore it will be the same source as the graph's source).
7. *Going further*: **Discuss** your map with a classmate. **Determine** whether you can see any patterns. **Identify** where most of the destination countries are located. **Identify** where most of the origin countries are located. **Propose** some push and pull factors that may apply to this data.

10.3 Exercise

learnon

Learning pathways

■ LEVEL 1
2, 3

■ LEVEL 2
1, 4, 5, 8

■ LEVEL 3
6, 7, 9, 10

REMEMBER AND UNDERSTAND

1. Refer to **FIGURES 4** and **5**. **Describe** how the origins of our migrants have changed since 1949.
2. Are the following statements true or false?
 - a. The greatest number of migrants are in Australia for family reasons or are skilled workers.
 - b. In 2020, Australia was the most popular destination for international migrants.
 - c. Since 1975, Australia has attracted more immigrants from Asia.
3. **Select** the words from the table to complete the statement below.

emigrant	donor	immigrant	host
----------	-------	-----------	------

A person leaving one country to move to another is called an _____. The country they are moving from is the _____ country. When they enter a new country, they become classified as an _____ and the new country is the _____ country.

4. Refer to **FIGURE 7**. **Describe** how important migration has been in terms of Australia's population growth.
5. **Consider FIGURE 1**. A number of countries feature on the list of top 20 destination countries for international migrants as well as the list of top 20 origin countries. **Select** those that apply from the list below.

A. Thailand	E. Mexico
B. Romania	F. Kazakhstan
C. Russian Federation	G. Australia
D. India	

ANALYSE AND APPLY

6. Refer to **FIGURE 8**. **Explain** the general pattern for each of the following types of migration to Australia between 2013 and 2024.
 - a. Skilled migrant
 - b. Family
 - c. Total numbers
7. Refer to **TABLE 1**. **Describe** how the distribution of migrant groups varies within Australia. Ensure that you include at least three states in your analysis.
8. Refer to **FIGURE 6**. **Outline** the main reasons why people would migrate to Australia.

EVALUATE AND COMMUNICATE

9. **Determine** the two main benefits of migration to Australia. Give reasons for your answer.
10. **Explain** what types of skills you would place at the top of the list for skilled migrants to Australia. **Justify** your answer.

Answers and sample responses for this topic are available online.

LESSON 10.4 Internal migration in Australia

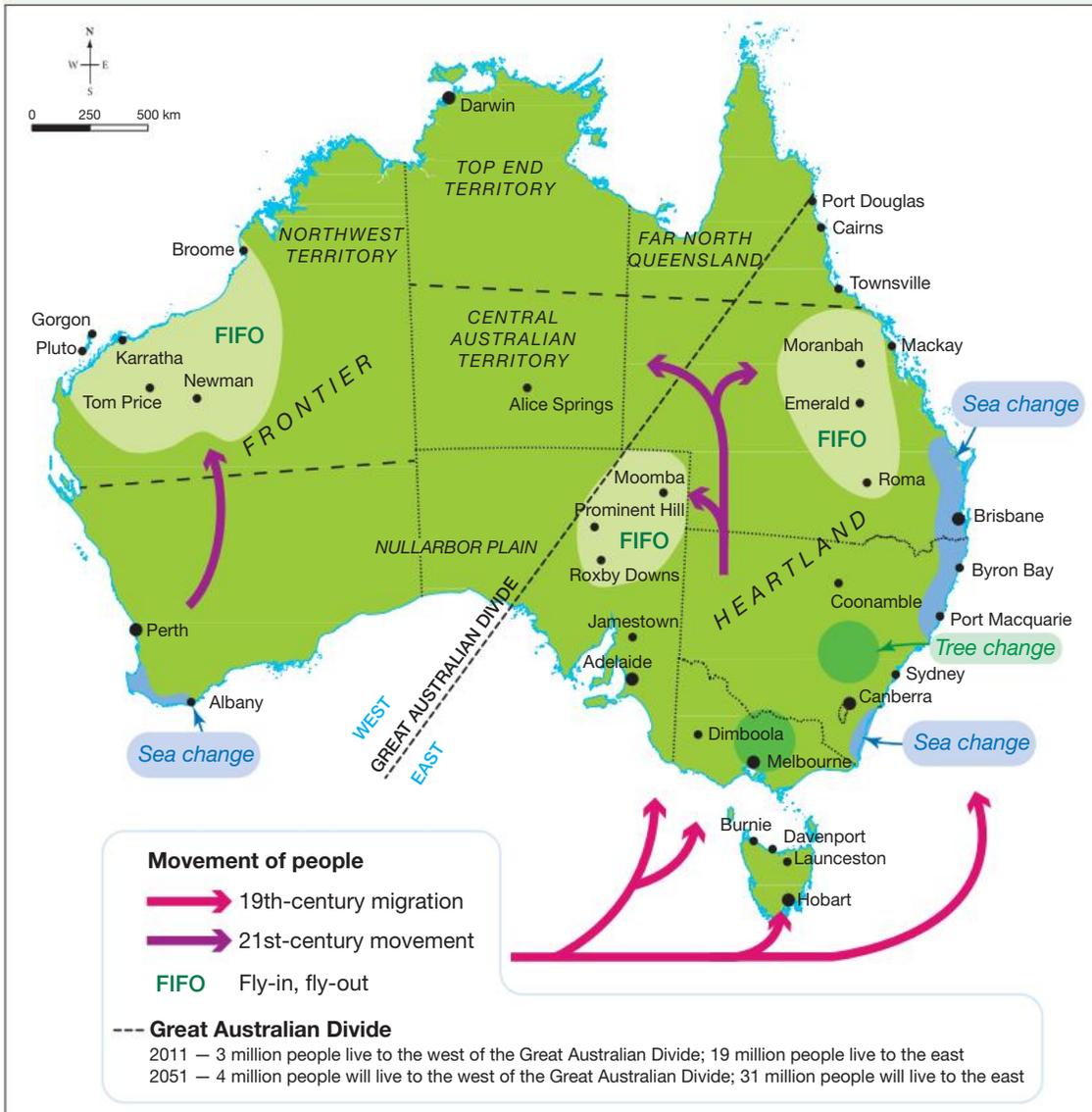
LEARNING INTENTION

By the end of this lesson you should be able to **explain** why people within Australia internally migrate.

Tune in

Australians move from place to place within Australia for a number of reasons; some of these are illustrated in **FIGURE 1**.

FIGURE 1 Australia's moving population



Source: Map drawn by MAPgraphics

1. What do you think is meant by the terms *sea change* and *tree change*?
2. FIFO is an acronym that refers to workers who 'fly-in fly-out' of locations. Look at the regions identified as FIFO on the map. What do you know about these regions? What is the focus industry for these regions that workers are employed within?
3. Do you personally know any FIFO workers or people who have been involved in a sea or tree change?

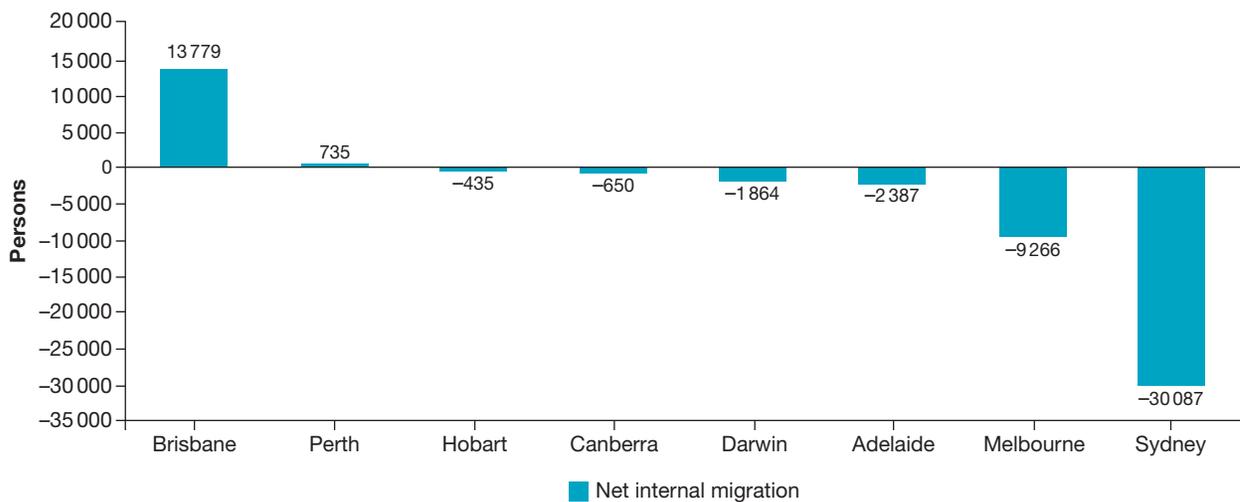
10.4.1 What makes people move within Australia?

People move for many reasons. The average Australian will live in 11 houses during their lifetime — this means that many people will live in more. You may move to live in a larger house or a smaller house as your family size or income changes. On retirement, you may want to live near the mountains or the sea.

Forty per cent of Australians changed the place where they lived in the five years prior to 2020. There has also been a recent pattern of people internally migrating to regional centres, primarily because of housing costs.

It is important to note that **internal migration** refers to people already living within Australia and thus the figures discussed do not account for new migrants.

FIGURE 2 Net internal migration by capital city (2020)



SkillBuilder discussion

Communicating and reflecting

1. Study **FIGURE 2**. Identify the two cities with increased populations because of internal migration.
2. Discuss why Melbourne and Sydney are losing the most people.
3. Propose how the COVID-19 pandemic (2020–2021) may have impacted these figures.

The Great Australian Divide splits Australia into two regions: the Heartland and the Frontier. The Heartland has about 21 million people living in modern, urban areas. The Frontier is home to around 5 million people in remote, resource-rich areas.

Urban-to-rural migration — sea change or tree change

The expressions **sea change** and **tree change** refer to people moving from cities to coastal or rural areas, seeking a peaceful life and closer community. Another pull factor is more affordable housing. This trend affects coastal and mountain areas across Australia, with local communities often struggling to provide

the necessary services and infrastructure for the growing population. Popular spots for sea changers include Geelong, Busselton, Wollongong, Cairns and the Gold Coast.

Not everyone enjoys their new rural life, and some return to the city due to missing family, friends, cultural activities, or professional and health services.

Fly-in fly-out workers

Mining jobs have increased in the states such as Queensland and Western Australia. However, local towns lack the infrastructure to support a large population, and rent can be as high as \$3000 per week.

To attract workers, companies use a **fly-in fly-out (FIFO)** workforce. FIFO workers commute from places like Perth or even Bali, rather than living locally. This has the potential to make local residents feel uneasy, partially because FIFO workers don't invest their wages in the local economy, changing the town's nature without becoming part of the community.

FIGURE 3 Margaret River is a popular location for sea changers.



FIGURE 4 In Western Australia, there are a large number of FIFO workers in the mining industry, who often live in simple accommodation.



Seasonal agricultural workers

Many rural jobs, like picking and pruning grapes and fruit trees, are seasonal and need a large workforce for only a few months each year. Many rural young people move to cities for education, jobs or a more exciting life, leaving a shortage of agricultural workers.

Backpackers and people from Asia and the Pacific Islands on short-term work visas often fill these seasonal jobs. Towns like Robinvale in northern Victoria now have Asian grocery stores, an Asian bakery, and shops selling Tongan goods to cater to these workers. Robinvale is home to people from many countries, including Italy, Tonga, Vietnam, Malaysia, New Zealand, China and Greece.

Rural-to-urban migration

Many people leave rural areas for economic reasons including to work in cities, where there are more businesses and industries. Another reason young people move to urban areas is for education and training not available in rural areas.

10.4 SkillBuilder activity

QUESTIONING AND RESEARCHING, ANALYSING

1. In pairs, **investigate**, conducting research on the internet, the impact that COVID-19 (and extended lockdowns in particular) had on the number of tree changes and sea changes occurring in Australia during 2020–21.

In conducting your research, try to find:

- origins and destinations of migrants (where were people mostly moving from/to)
- factors that made the migration possible (e.g. ability to work from home)
- relevant statistics.

The ABS website may be a useful place to start. Search phrases such as ‘migration within Australia COVID-19’ or ‘migration Australia COVID-19 sea change’ to explore other resources. Remember to keep the focus on migration within Australia rather than between Australia and other countries.

2. **Communicate** your findings by **creating** an infographic.

10.4 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 4

■ LEVEL 2

3, 5, 6

■ LEVEL 3

7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. FIFO workers are those who permanently live in a remote work location. True or false?
2. **State** the difference between a tree changer and a sea changer.
3. **List** the positive and negative factors of making a tree change or sea change as a:
 - a. family with young children
 - b. retired couple.
4. Where do the majority of Australians live?
 - A. To the east of the Great Australian Divide
 - B. To the west of the Great Australian Divide
 - C. To the north of the Great Australian Divide
 - D. To the south of the Great Australian Divide
5. What initially led to people leaving rural areas for life in the city?
 - A. A more peaceful existence
 - B. Employment
 - C. Affordable housing
 - D. To spend more time outdoors

ANALYSE AND APPLY

6. **Describe** some of the push factors that lead to rural-to-urban migration.
7. **Outline** one reason for internal migration in Australia.
8. Look carefully at **FIGURE 1** and **explain** how the gap between Australia's east and west is predicted to alter over the next 40 years.

EVALUATE AND COMMUNICATE

9. A more recent population migration is towards high-rise apartment living in the centre of major cities. How might this trend impact on these new residents and the sustainability of the environment their migration is creating? Use examples to **justify** your stance.
10. **Explain** two challenges created by urban-to-rural migration.

Answers and sample responses for this topic are available online.

LESSON 10.5 Inquiry: A migration story

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** and explain the main types and patterns of internal and international migration
- **develop** research, data analysis and communication skills to effectively present findings on migration.

Background

Your task is to explore a migration story connected to you.

This could be from your own family or from someone close to you, like a family friend or trusted adult.

Try to find out how they or their family came to live in Australia.

You can do this by:

- Talking to your parent, guardian, or another trusted adult at home.
- Asking questions in a safe and respectful way.
- Doing some research about the country or culture they came from.

If you're not sure who to talk to or need help getting started, speak to your teacher.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

FIGURE 1 From where has your family migrated?



Inquiry steps

Step 1: Questioning and researching

Research your family's history and find out how they came to Australia. Select a family member to interview and investigate your family's country of origin.

The report will be in **two** parts.

Part 1

Create a report about Australia and your family's emigration country, highlighting the impact on both nations.

Part 2

Plan an interview detailing how migration affected your interviewee's family.

Step 2: Analysing

The research report

Analyse the country of origin. Include:

- a map of the country at the time of emigration
- population and demographic information
- government type (e.g. democracy, communism)
- major religions
- social and economic issues
- interesting facts or differences between the two nations
- Australia's immigration policies at the time.

Step 3: Evaluating

The interview

Select an interviewee. Discuss potential questions and interesting stories from your family. Your interview should cover:

- reasons for leaving and choosing Australia
- links with the old culture (food, language)
- evaluation of migration's impact on the family, the donor country and Australia.

Prepare ten to fifteen open questions to encourage detailed responses. Record the interview and be flexible, allowing the interviewee to elaborate on interesting points.

Step 4: Communicating and reflecting

Prepare a written report with the information from Step 2.

Summarise your impressions of the interview. Discuss the migration's impact on:

- the individual
- their family
- The donor country
- Australia.

Submit your interview as an audio or video file. Include a transcript if it's in another language.

Summarise your impressions of the interview. Discuss the migration's impact on:

- the individual
- their family
- The donor country
- Australia.

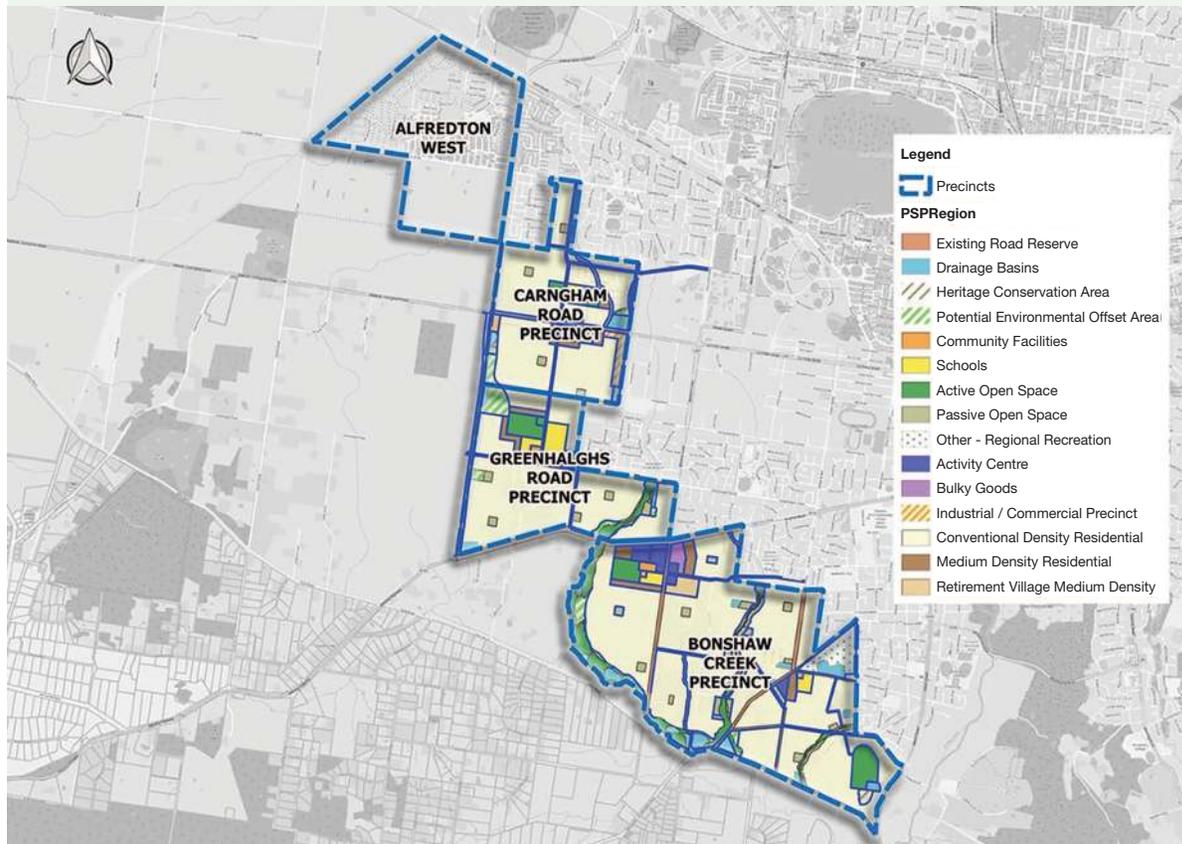
LEARNING INTENTION

By the end of this lesson you should be able **identify** causes and consequences of urbanisation in Australia.

Tune in

The Victorian city of Ballarat is currently undergoing urban expansion. The city is looking to provide 18 000 new houses to accommodate a population of 40 000 people.

FIGURE 1 Proposed plans for the urban expansion of Ballarat



1. How many areas have been set aside for schools? Do you think this is enough?
2. Consider the space allotted to residential areas and the space allotted to the green and open spaces. Do you think this is enough to make this a sustainable community?
3. How do you think this urban growth will impact the environment? List any positives and any negatives.

10.6.1 Urbanisation in Australia

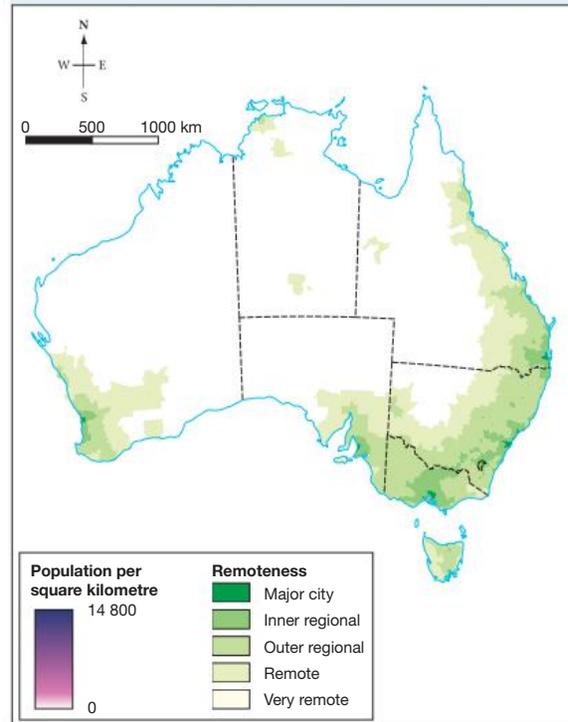
Urbanisation is the movement of people from the country to the city. It's part of a country's internal migration. Cities were formed as a result of people moving from the country and gathering and settling in a central area.

With a population of over 27 million people in 2024 and a very large landmass, Australia has an average **population density** of only 3.4 people per square kilometre. Yet 85 per cent of people live within 50 kilometres of the coast, and most of these people live in urban areas.

Australia is one of the most urbanised and coastal dwelling populations in the world, and the level of urbanisation is increasing. From federation (1901) until 1976, the number of Australians living in capital cities increased gradually from a little over one-third (36 per cent) to almost two-thirds (65 per cent). Since 1977, the population living in capital cities has grown to 66 per cent. By 2050, about 93 per cent of Australians will live in urban areas.

All of Australia's capital cities have grown over time, as have many regional urban areas, such as the Gold Coast and Moreton Bay regions. This growth is expected to continue in the future (see **TABLE 1**).

FIGURE 2 A map of Australia's population distribution shows that it is highly urbanised and coastal.



Source: © Australian Bureau of Statistics.

TABLE 1 Australian capital city 2023 populations and projections for 2036 and 2066

City	2023 population	Projected 2036	Projected 2066
Sydney	5 450 500	7 379 976	11 240 860
Melbourne	5 207 100	7 520 830	12 235 490
Brisbane	2 707 000	3 596 431	5 782 256
Perth	2 309 300	2 798 994	4 330 509
Adelaide	1 446 400	1 605 335	2 068 550
Hobart	253 700	297 085	466 752
Darwin	150 700	195 082	295 458
Total	17 991 300	23 393 733	36 419 875

Source: © Australian Bureau of Statistics

10.6.2 Causes of urbanisation in Australia

Urbanisation has many benefits for both urban and rural residents. This is because cities offer wider education and job opportunities, allowing people to earn and spend more, boosting GDP. Cities also foster new ideas and technologies, which can create wealth. Access to services like high-speed internet in cities helps with education, jobs and businesses. On a personal level, city living provides more services and facilities than rural areas. With more people in a smaller area, it's easier to provide government support and facilities like housing, roads, public transport, hospitals and schools.

There are also cultural and social advantages of urbanisation. Cities frequently have more sporting facilities, museums, galleries, theatres and playgrounds than rural locations do, as well as a greater variety of different cultures, their cuisines and their practices, all living side-by-side.

FIGURE 3 Perth has a large variety of restaurants and cultural attractions.



10.6.3 The consequences of a highly urbanised Australia

Urban sprawl

When cities expand, the urban landscape invades the surrounding land, changing or removing natural ecosystems and swallowing up farmland. This expansion is known as **urban sprawl**. Perth in Western Australia is a very good example of a sprawling city. The metropolitan area of Perth extends approximately 120 kilometres from Alkimos in the north to Mandurah in the south (see **FIGURE 3**).

As Perth has grown outwards, the coastal sand-dune systems have been cleared of vegetation. Sand dunes are easy to shape for residential development, and this has led to rapid and extensive north-south expansion along the coast. Inland from the sand dunes, wetland areas — where intensive agriculture such as market gardening (vegetables) and viticulture (grapes) once dominated — have also been absorbed by urban growth. These wetlands have often been reshaped to capture water run-off from new housing developments. The fertile soil has been lost forever.

Historically, urban areas were settled where the land was flat, the water and soil were good and the climate was temperate — in other words, where good farmland is located. When cities spread, the sprawl takes over arable land (land able to be farmed for crops). Urban sprawl has long-term effects, because it is very difficult to bring the soil back to its former state once the majority of the land has been used for buildings.

FIGURE 4 Perth's urban sprawl



Many of Australia's cities, including Perth, have been called 'car cities' due to the reliance on private motor vehicles and road networks for transport. Perth's north-to-south morphology (shape) is reflected in its freeway system, which can become very congested. This has an impact on distances and commuting times for people travelling to and from workplaces.

Housing affordability

Urbanisation also affects housing costs, as when more people move to cities, house prices can rise. This makes it hard for people to find affordable homes, increasing social inequality because lower-income people are pushed further from city centers. As a result, cities spread out more (urban sprawl), leading to environmental challenges.

Environmental challenges

As discussed, Australia's population is growing and changing and becoming more urban. This growth can have negative impacts on the environment, such as pollution, loss of biodiversity, water shortages, more greenhouse gas emissions and food security issues. Urbanisation can increase traffic congestion, and put pressure on access to services, infrastructure and green spaces. To tackle these challenges, we need to plan for a growing population by building adaptable communities.

10.6.4 The rural lifestyle

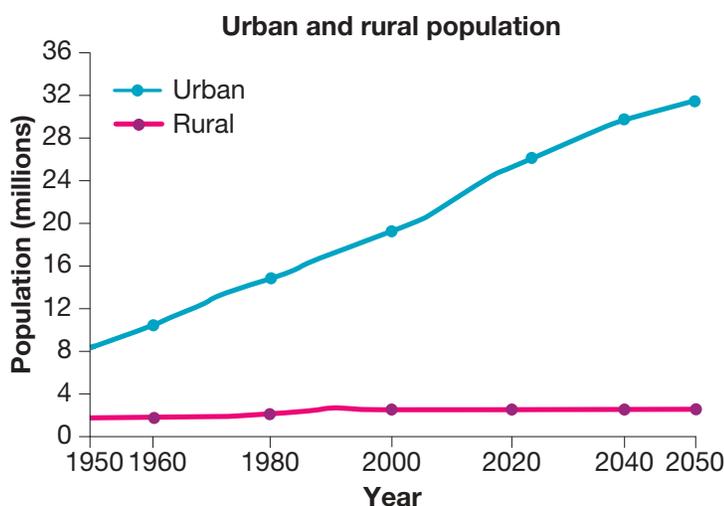
Although urbanisation is growing, some city residents will make a tree or sea change to rural or coastal areas, as shown in lesson 10.4. Rural populations are generally stable or decreasing as young people move to cities for jobs and education. Some rural communities maintain their populations by shifting from manufacturing to services, and as the COVID pandemic demonstrated, people can live remotely as a result of better internet and improving public transport.

SkillBuilder discussion

Analysing

1. Look at **FIGURE 4**. Describe the overall trend in this graph.
2. Explain why the majority of Australia's population growth has occurred in urban areas.
3. Discuss why the changes in work practices as a result of the COVID-19 pandemic may change the pattern represented in this graph.

FIGURE 4 Change in Australian urban and rural populations over time



10.6 SkillBuilder activity ANALYSING

Use your atlas or online research to find an urban growth map for the capital city in your state or territory. **Describe** the change that has taken place over time. Using this map and a physical map of your state or territory, **predict** where future growth might occur. **Justify** your responses.

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 7, 9

■ LEVEL 3

6, 8, 10

REMEMBER AND UNDERSTAND

1. Identify the percentage of Australians who live in urban areas.
 - A. 32 per cent
 - B. 50 per cent
 - C. 89 per cent
 - D. 95 per cent
2. Identify the percentage of Australians who live within 50 kilometres of the coast.
 - A. 38 per cent
 - B. 48 per cent
 - C. 84 per cent
 - D. 90 per cent
3. Identify the percentage of Australians who are projected to live in the capital cities by 2053.
 - A. 20 per cent
 - B. 33 per cent
 - C. 60 per cent
 - D. 72 per cent
4. **Explain** what is meant by the term *urban sprawl*.
5. Referring to **FIGURE 2**, **describe** the population distribution of Australia.

ANALYSE AND APPLY

6. Refer to **TABLE 1**. **Construct** a bar graph to show the predicted change in the populations of Australia's capital cities. **Explain** what your graph reveals.
7. **Summarise** the main advantages of urbanisation for residents of cities.
8. **Describe** why the expansion of Perth inland could pose a long-term problem.

EVALUATE AND COMMUNICATE

9. **Suggest** how the expansion of Perth along a relatively narrow strip along the coast could pose a problem for transport in the future.
10. Think about the last time you visited a city. You might live in one. **Identify** some of the cultural or social activities or events that you have access to in a city that you wouldn't have in a rural area. How do these city experiences enhance the quality of life for urban residents compared to those living in rural settings?

Answers and sample responses for this topic are available online.

LESSON 10.7 Urbanisation in Indonesia

LEARNING INTENTION

By the end of this lesson, you should be able to:

- **explain** the causes of urbanisation and urban growth in Indonesia and another country
- **discuss** the impact of urbanisation on the environment in Indonesia
- **discuss** the economic, aesthetic and cultural consequences of urbanisation.

Tune in

Indonesia is one of Australia's closest neighbours — but what do we know about it?

FIGURE 1 Map of Indonesia



Source: Spatial Vision

Complete a mind map of what you already know about Indonesia and Jakarta. Consider where Indonesia is, who lives there, how many people live there and whether there are any tourist attractions.

10.7.1 Indonesia's population

Many people do not realise that the fourth most populated country in the world is one of our nearest neighbours. Like many countries in Asia, Indonesia has experienced rapid urban growth, but this has occurred only relatively recently. Indonesia's population of nearly 284 million people (2024) lives on an archipelago, a chain or cluster of more than 18 000 islands (see **FIGURE 1**). However, its population is not evenly distributed. Only about 11 000 of the islands are actually inhabited. Sixty per cent of Indonesia's population is concentrated on only seven per cent of the total land area — on the island of Java.

Indonesia has changed from a rural to an urban society quite recently. In 1950, only 15.5 per cent of its population lived in urban areas. In 2018, this had increased to 55.3 per cent.

Causes of urbanisation in Indonesia

More than one-third of Indonesia's urban growth is due to natural population increase. The population reached 100 million in 1962 and doubled to 200 million by 1997. In the early 1970s, the birth rate was high at 5.6 children per woman, but it dropped to 1.2 per cent by 2015. In 2023, nearly 4.4 million babies were born, almost the population of Melbourne.

Few restrictions on rural–urban migration led many rural poor to move to cities, often into slums, leaving families behind. Recently, about 20 000 foreigners per year have been obtaining work permits in Indonesia.

Investment, both local and foreign, mainly goes to large urban areas due to available workers, transport, water and electricity.

President Sukarno, the first president of Indonesia from 1945 to 1967, aimed to make Jakarta like Paris and New York, building broad avenues, highways, electric railways, luxurious housing, high-rise buildings, universities and industrial estates. The ambitious investment during this period increased the rate of urbanisation as rural people flooded into Jakarta to be part of this rapidly growing metropolis.

FIGURE 2 Selected south-east Asian city populations, 1950–2030 projected



Source: United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, CD-ROM Edition.

SkillBuilder discussion

Analysing

1. Study **FIGURE 2**. **Identify** where the largest city in Indonesia is located.
2. **Discuss** any spatial associations you can identify on this map.
3. **Identify** the cities that have become megacities (greater than 10 million people).

FIGURE 3 The Jakarta metropolitan area had a population of over 10 million in 2023 and a population density of over 16 000 people per square kilometre.



10.7.2 Consequences of urbanisation

Growth of Jakarta

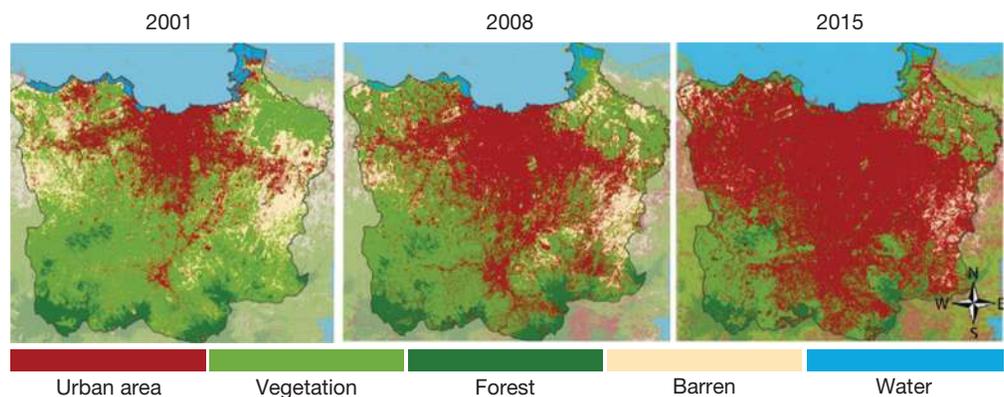
One of the consequences of urbanisation in Indonesia has been the dramatic growth of Jakarta, Indonesia's capital and largest city, located on the north-west coast of Java. The central island of Java is the world's most populous island, having a population density of 1000 people per square kilometre. The Jakarta Metropolitan Area (JMA) is now one of the world's largest urban areas. In 1930, Jakarta's population was around half a million people. By 1961 it had grown almost six-fold to 2.97 million. By 2005, it was almost 9 million. In 2024, the Special Capital Region of Jakarta had a population of just over 10 million, while the greater metropolitan agglomeration had a population of over 32 million.

SkillBuilder discussion

Analysing

1. Why can't Jakarta expand to the north?
2. Describe the expansion of Jakarta over this period. Ensure that you use direction in your discussion.
3. Discuss the potential problems that Jakarta's rapid expansion may cause.

FIGURE 4 Jakarta's urban growth



Loss of land

As Jakarta has urbanised, open green space has decreased from nearly 30 per cent in 1984 to less than 10 per cent in 2015, and around 4.5 per cent in 2023. Efforts are being made to 're-green' the city.

Prime agricultural areas have turned into residential and industrial zones because urban land is more valuable.

Environment

Indonesia has low sewerage and **sanitation** coverage. Sewage from homes and industries, along with agricultural run-off, pollutes water sources. Air pollution is high due to traffic, industrial fumes and smoke from forest-clearing fires.

FIGURE 5 Impacts of Jakarta's rapid growth



Air pollution or smog over the city



Significant traffic congestion



Labour force has moved from the country to the factories in the cities, resulting in a loss of labour force in rural areas.



Land for food production has been lost due to urban sprawl.



Subsidence and flooding. Many parts of Jakarta are sinking as the water table drops and more buildings are constructed.



There are plans to relocate the government buildings and much of the infrastructure to a new capital city in Borneo.

10.7 SkillBuilder activity ANALYSING, EVALUATING

1. Use a map or atlas to **locate and label** these cities on outline map of Australia:
 - Sydney
 - Melbourne
 - Brisbane
 - Perth
 - Adelaide
 - Canberra.
2. Use a map or atlas to **locate and label** these cities on outline map of the USA:
 - New York
 - Los Angeles
 - Chicago
 - Houston
 - Phoenix
 - Washington D.C.
3. Where are most major cities located in each country?
4. What physical features influence where cities are built?
5. **Summarise** one similarity in city locations between Australia and the USA
6. **Summarise** one difference in how cities are spread across the countries.
7. **Explain** the spread of urban settlements in Australia compared to the USA with reference to differences in population size, key geographic features and land use.

10.7 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 7

■ LEVEL 3

6, 8, 9

REMEMBER AND UNDERSTAND

1. Which of the following statements is **not** a reason why Indonesia has become very urbanised?
 - A. There has been a sharp rise in population and increasing unrestricted migration from rural areas to urban cities.
 - B. The first president of Indonesia wanted Indonesian cities to be like the world's great cities, and he constructed infrastructure and facilities.
 - C. There has been a sharp drop in population and increased migration to rural areas.
 - D. There has been heavy investment mainly in the large urban areas.
2. There is no interconnection between the increasing population in Indonesia and the subsidence of land. True or false?
3. **Explain** how and why Jakarta has become a major city within Indonesia and also on a world scale.
4. **Suggest** why you think people have moved from rural areas to urban areas within Indonesia.

ANALYSE AND APPLY

5.
 - a. **State** Indonesia's current population.
 - b. If the area of Indonesia is 1 904 569 square kilometres, **calculate** its approximate population density.
 - c. **Compare** this to Australia's population density of 3.1 people per square kilometre.
 - d. **Describe**, using statistics, how Indonesia has become very urbanised in a relatively short time.
6. **Explain** what are the three main reasons that Indonesia has undergone such rapid urbanisation.

EVALUATE AND COMMUNICATE

7. Urbanisation causes many harmful consequences to the environment. **Outline** which of the consequences of urbanisation may continue to have the biggest effects on the environment in the future.
8. **Discuss** how the urbanisation of Indonesia is similar to and different from the urbanisation of Australia.
9. **Investigate** the start of the construction of the new capital city, Nusantara Capital City, in the East Kalimantan province of Indonesia. Present the pros and cons of such a dramatic move.

Answers and sample responses for this topic are available online.

LESSON 10.8 Investigating topographic maps – Jakarta

LEARNING INTENTION

By the end of this lesson you should be able to **identify** land heights and features across Jakarta on a map.

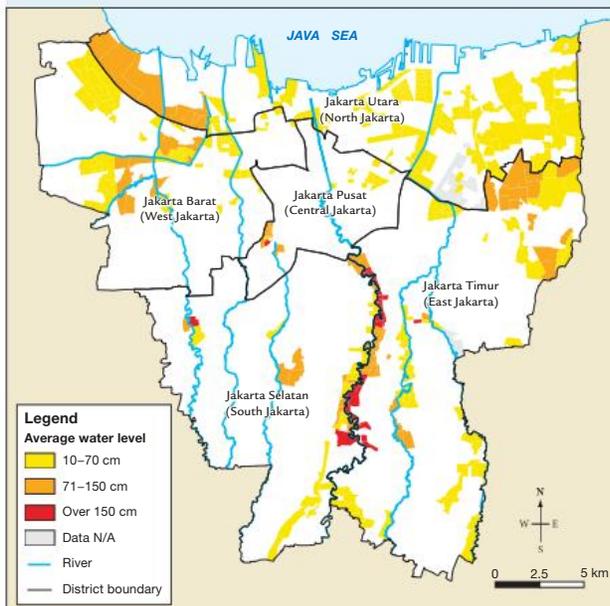
10.8.1 Urbanisation in Jakarta

Jakarta is situated on flat lowlands on the northern coast of Indonesia's West Java province. The city has expanded rapidly; in central areas, it has a population density of about 16 000 people per square kilometre.

Jakarta has regularly experienced flooding as a result of a combination of factors including:

- heavy wet-season rainfall
- low relief and land sitting below sea level
- shallow rivers that easily flood
- rubbish deposits in river beds.

FIGURE 1 Areas of Jakarta that experienced severe flooding in January 2014



Source: Based on OCHA/ReliefWebSource: ReliefWeb/OCHA Indonesia Jakarta 2014 [https://reliefweb.int/sites/reliefweb.int/files/resources/Update on Jakarta Flood as of 21Jan2014-R.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/Update%20on%20Jakarta%20Flood%20as%20of%2021Jan2014-R.pdf).

FIGURE 2 The flooding severely impacted homes.

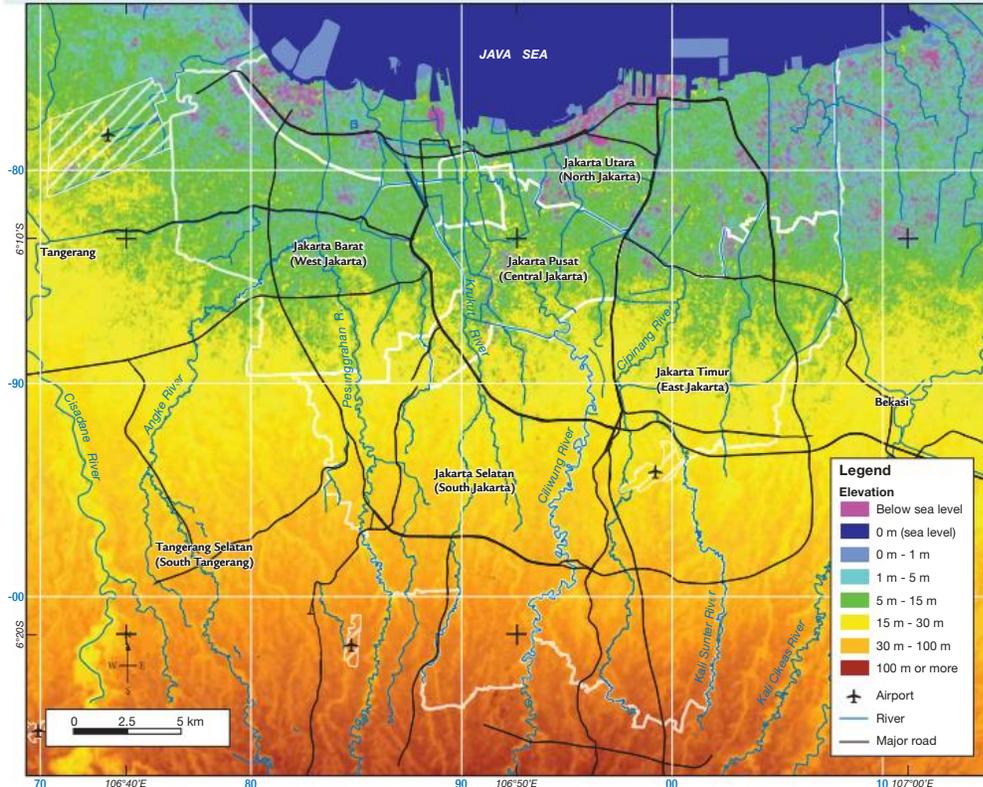


FIGURE 3 The extensive flooding in Jakarta





FIGURE 4 Thematic map of land heights in Jakarta



Source: Map data © OpenStreetMap contributors, <https://openstreetmap.org>. Data is available under the Open Database Licence, <https://opendatacommons.org/licenses/odbl/>; elevation data sourced from USGS.

10.8 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2

■ LEVEL 2

3, 4

■ LEVEL 3

5

REMEMBER AND UNDERSTAND

1. **Describe** the location of Jakarta.
2. Referring to **FIGURES 1** and **4**, **list** four reasons why Jakarta regularly floods.
3. Referring to **FIGURE 4**, give an area reference for one part of Jakarta that you think would be particularly prone to flooding. Give reasons to **justify** your choice.

ANALYSE AND APPLY

4. If residents in Jakarta are banned from accessing groundwater, **identify** any other natural sources from which they could obtain drinking water.
5. If you were given the task of moving residents whose homes will be underwater in the next 20 years, **identify** which areas would be your first priority. Refer to **FIGURE 4** and provide the area or grid references and reasons for your choice.

Answers and sample responses for this topic are available online.

LESSON 10.9 Review

10.9.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

10.2 What is migration?

- Migration is when people move from one place to settle in another.
- Migration types can be categorised by time, location and degree of choice.
- Push and pull factors influence decisions to migrate.
- Push factors are unfavourable qualities or conditions that make people want to leave a place.
- Pull factors are desirable qualities or conditions that attract people to a new place.

10.3 International migration to Australia

- Emigrants are leaving a country; immigrants are entering a country.
- Annual net migration takes into account the difference between the number of people who move into a country and the number who leave it over the course of a year.
- Push and pull factors influencing international migration can be broadly categorised as social, economic, political or environmental.
- The majority of international migrants to Australia are from Europe or Asia due to the cultural connection and/or geographic convenience.
- Migrants come to Australia for a large variety of reasons.

10.4 Internal migration in Australia

- Internal migration in Australia is driven by lifestyle changes, housing costs and job opportunities, with many moving between urban, coastal and rural areas.
- Popular migration trends include 'sea change' or 'tree change' for a peaceful life, fly-in fly-out (FIFO) work in mining regions, and seasonal agricultural jobs often filled by international workers.
- The Great Australian Divide separates the urban Heartland, home to 21 million people, from the remote, resource-rich Frontier, which has 5 million residents.

10.5 Inquiry: A migration story

- To gain an understanding of the reasons people migrate
- Develop an awareness of the impact of migration on the destination country
- Understand how emigration impacted the nation that the subject left

10.6 Urbanisation in Australia

- Australia is one of the most urbanised nations in the world.
- The causes of urbanisation include better education and work opportunities, as well as a wider variety of social and cultural attractions.
- The consequences of a highly urbanised Australia include the loss of surrounding farmland, a loss of biodiversity and an increased use of cars and thus traffic congestion.
- In recent years we are increasingly seeing the advent of people leaving the cities for a sea or tree change.

10.7 Urbanisation in Indonesia

- Rural–urban migration and natural population increase have changed Indonesia's population over time.
- Jakarta has experienced rapid population growth over time.
- Jakarta has a major subsidence issue that is leading to a number of health and safety issues.

10.8 Investigating topographic maps – Jakarta

- Jakarta regularly experiences flooding as a result of a combination of factors such as being situated on flat lowlands, having shallow rivers that can overflow and having heavy wet-season rainfall.

10.9.2 Key terms

emigrants people exiting a country of origin

fly-in fly-out (FIFO) a system in which workers fly to work, in places such as remote mines, and after a week or more fly back to their home elsewhere

immigrants people moving into their destination country

internal migration migration within a country

migrant a person who leaves their own country to go and live in another

migration moving from one country to live in another

population density the number of people living within one square kilometre of land; it identifies the intensity of land use or how crowded a place is

population distribution the pattern of where people live; population distribution is not even — cities that have high population densities and remote places such as deserts usually have low population densities

pull factor favourable quality or attribute that attracts people to a particular location

push factor unfavourable quality or attribute of a person's current location that drives them to move elsewhere

sanitation facilities provided to remove waste such as sewage and household or business rubbish

sea change movement of people from major cities to live near the coast to achieve a change of lifestyle

sustainability the responsible use and management of resources to meet current needs while ensuring future generations can also meet theirs.

tree change movement of people from major cities to live near the forest to achieve a change of lifestyle

urban relating to a city or town; the definition of an urban area varies from one country to another depending on population size and density

urban sprawl when cities expand, the urban landscape invades the surrounding land, changing or removing natural ecosystems and swallowing up farmland. This expansion is known as urban sprawl.

urbanisation the growth and expansion of urban areas and the increasing proportion of people living in urban areas as compared to rural areas

10.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the Inquiry question posed in the Overview.

Why do people move between and within countries, and how are our urban environments changing to provide a sustainable future?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning on this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry questions, outlining your views.

learn on



Post-test Online post-test



eWorkbooks Customisable worksheets for this topic
Reflection



Digital doc Key terms glossary

10.9 Review exercise

Learning pathways

■ LEVEL 1

1, 2, 4, 7, 9, 11

■ LEVEL 2

3, 6, 8, 12, 13, 14

■ LEVEL 3

5, 10, 16

REMEMBER AND UNDERSTAND

1. Explain the meaning of the term *urbanisation*.
 - A. Movement of people from urban to rural areas
 - B. Growth and expansion of rural areas
 - C. Lower population densities in urban areas
 - D. Growth and expansion of urban areas
2. Explain why people might migrate to Australia.
 - A. Political stability
 - B. Employment/jobs
 - C. Family reunions
 - D. All of the above
3. Positive net migration means that:
 - A. more people have moved to a country than have left it.
 - B. more people have left a country than have moved to it.
 - C. there has been no difference between the number of people moving to a country and the number of those who have left it.
 - D. the people who have migrated had a positive experience.
4. Identify which places in Australia tend to have the greatest population densities.
 - A. Inland regional and remote areas
 - B. Capital cities
 - C. Along the coast
 - D. Eastern Australia
5. What is one major reason people move from rural to urban areas?
 - A. To experience colder climates
 - B. To avoid paying taxes
 - C. To access better job opportunities
 - D. To live closer to wildlife
6. Which of the following best describes urbanisation?
 - A. The process of building farms in the countryside
 - B. The movement of people from cities to rural areas
 - C. The growth of cities as more people move into them
 - D. The decline of city populations over time
7. What is a 'push factor' in migration?
 - A. A reason that attracts people to a new place
 - B. A government policy encouraging tourism
 - C. A reason that forces people to leave their home
 - D. A type of transportation used in migration
8. Which of the following is a challenge caused by rapid urbanisation?
 - A. Increased biodiversity
 - B. Improved rural infrastructure
 - C. Overcrowded housing and traffic congestion
 - D. Decrease in city populations

9. Identify which of the following is not a sustainable urban project.
 - A. Beekeeping
 - B. Planting community gardens
 - C. Increasing infrastructure and car manufacturing
 - D. Recycling building materials
 - E. Solar panels
10. Why is sustainability important in urban planning?
 - A. To make cities more expensive
 - B. To reduce the number of people living in cities
 - C. To ensure cities can support future generations
 - D. To encourage people to move to rural areas

ANALYSE AND APPLY

11. **Classify** each of the following as either push or pull factors that have resulted in urbanisation.
 - a. Job opportunities
 - b. Political or religious freedom
 - c. Natural disasters
 - d. Lack of medical services or educational opportunities
 - e. War
 - f. Family links
12. Drawing on your own knowledge and your understanding of sea changes, tree changes and other forms of migration, **explain** how the COVID-19 pandemic has affected migration patterns within Australia (i.e. between states or within states).
13. **Distinguish** between emigration and immigration and provide an example.
14. Consider the capital city or regional city you live closest to. **Discuss** three actions that could be implemented to make this urban area more sustainable in the short term.

EVALUATE AND COMMUNICATE

15. Imagine that you are the mayor of a rapidly growing urban area where there is high natural population growth and an increase in people migrating to the area. After examining how urban slums develop, **propose** some actions you could take to prevent this from happening.
16. **Evaluate** the impact of migration on Australia since 1900. Ensure you discuss the changes in time of migration policies and the sources of migration to Australia.

Answers and sample responses for this topic are available online.

11 Historical concepts and skills

LESSON SEQUENCE

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LESSON 11.1 Overview

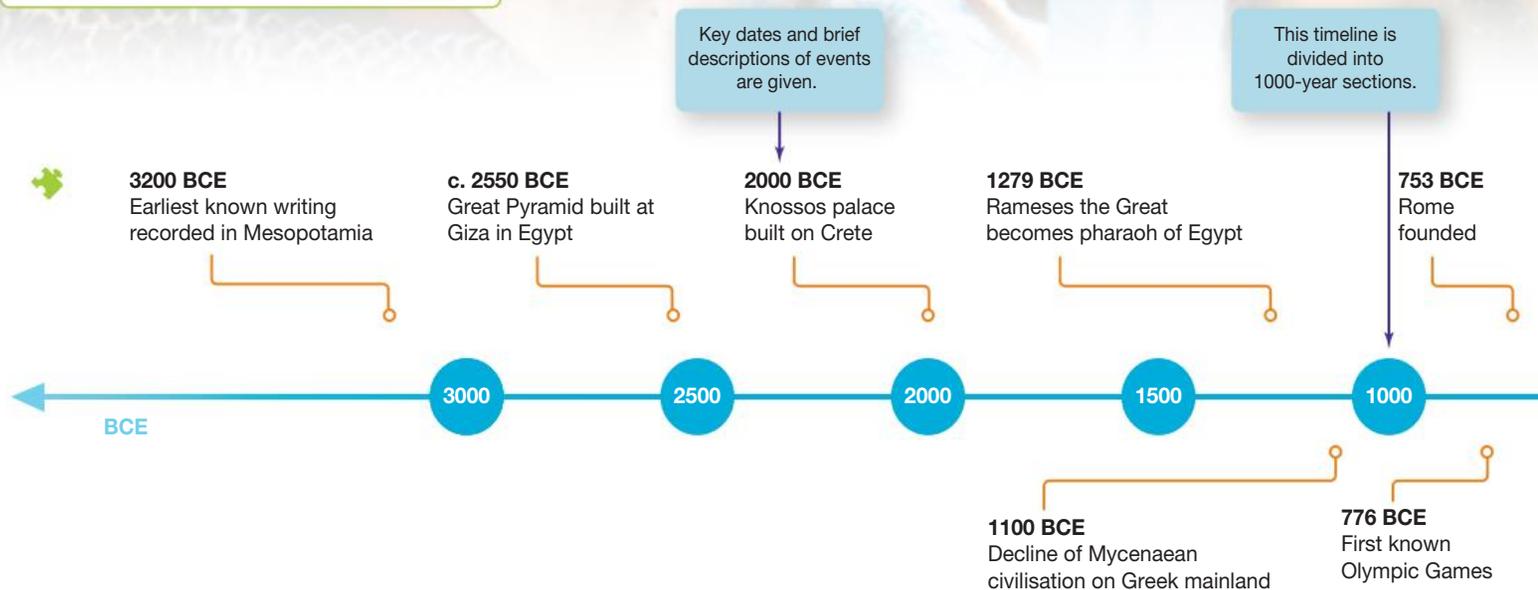
INQUIRY QUESTION

Why are the Medieval world and the Industrial Revolution important to study, and what skills do I need to understand this history?

Imagine a world hundreds of years ago, filled with knights, castles and grand adventures. This was the world of medieval Europe, a time that lasted for about a thousand years from 600 CE to 1500 CE. This period was marked by incredible transformations in society, ground-breaking inventions, and fascinating discoveries that have shaped the way we live today. The Industrial Revolution was also a time of great change in Europe, during the late eighteenth and nineteenth centuries. This era saw major advancements in technology and major shifts in society. In Year 8 History you will delve into these fascinating worlds and how they still influence us today.

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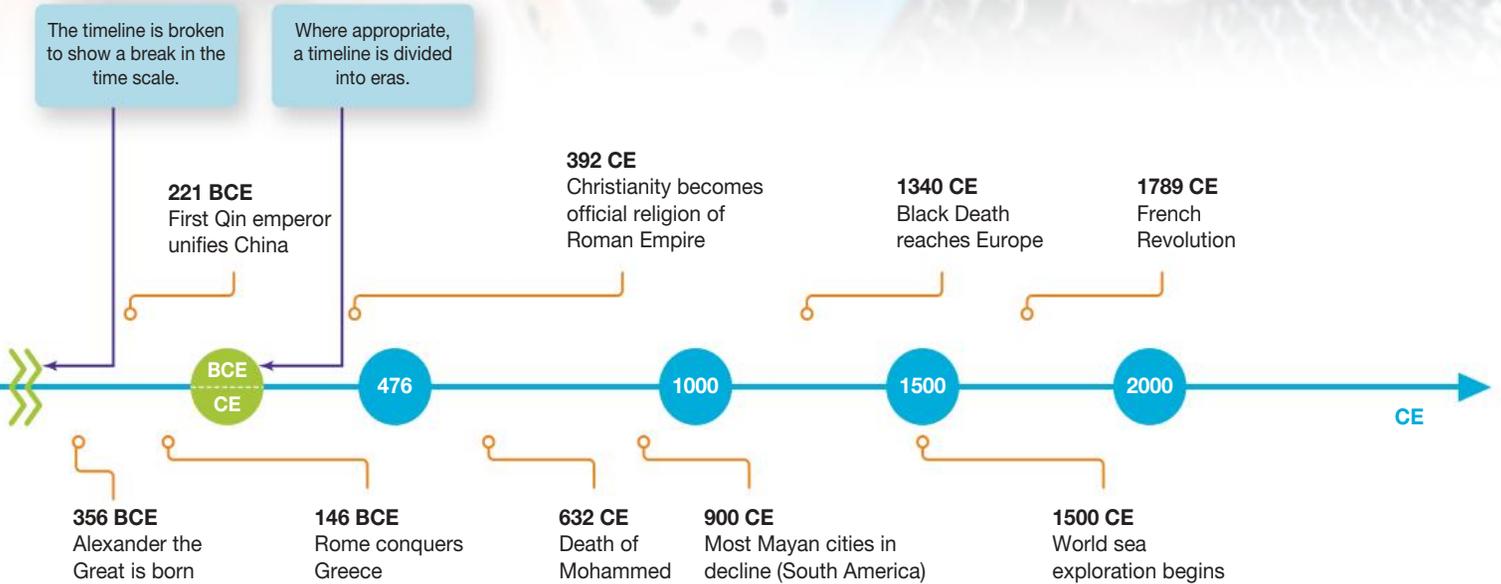
-  **eWorkbook**
Customisable worksheets for this topic
-  **Digital document**
Key terms glossary
-  **Video eLesson**
History concepts and skills



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING



LESSON 11.2 Historical concepts and skills

LEARNING INTENTION

By the end of this lesson, you should be able to:

- **identify** the historical concepts and skills
- **explain** why they are important.

11.2.1 Introduction

The period of medieval Europe spanned approximately one thousand years (from 600 CE to 1500 CE) and laid many foundations of modern western society. During the Middle Ages, the nature and organisation of society experienced fundamental changes. Elements of social hierarchy are still visible today, and differing religions continue to clash over some issues.

In the later medieval period, advancements in technology and learning such as gunpowder, agricultural improvements, early printing press models, and universities significantly influenced modern life. By the end of the Middle Ages, these advancements, along with global discoveries and new medical knowledge, led to an easier way of life.

The late eighteenth and nineteenth centuries experienced the Industrial Revolution, another era of change in manufacturing, transport, agriculture, trade and living conditions, paralleling the technological revolution we see today. Both revolutions transformed society, highlighting the continuous impact of innovation through history.

A revolution often represents significant change, where old methods are replaced by new approaches. The technological revolution today has changed how we work, communicate and process information, akin to the transformative effects of the Industrial Revolution's advancements.

11.2.2 Historical concepts

As we know, historians study past **civilisations**, cultures and societies to understand how people lived, their ideas, customs, rulers and livelihoods. They examine sources to explain how lives were shaped by other people and events. This topic covers concepts and skills related to discovering two periods of history—Medieval Europe and the Industrial Revolution (1750–1914).

TABLE 1 The concepts and skills that you will use in History

Concept	Description
Sources	Any written or non-written materials that can be used to investigate and give us information about the past.
Evidence	Written and non-written materials (sources) that can give us information about the past; evidence is the information we get from sources that is useful to our investigations.
Continuity and change	Considering the parts of life or society that have stayed the same and those that have changed over a period of time.
Cause and effect	Looking at the relationship between historical events or actions; e.g., when one event or action happens because of the other.
Significance	Considering the importance given to events of the past.
Perspective	Considering a person's point of view, and how they see and understand what is going on around them.
Empathy	Looking at the the past from the point of view of a person or group.
Contestability	Looking at the debate over how we interpret the past; e.g., because of a lack of evidence or different views.

SOURCE 1 We can also view the concepts diagrammatically.



The concepts and skills you will learn while studying History are also important in many careers. These skills will help you to:

- carry out research
- draw conclusions and make decisions based on evidence
- recognise the difference between fact and opinion
- understand that more than one way of thinking about any problem is usually possible
- think critically
- communicate effectively.

Knowledge of history is important in our everyday lives too. And history gives many people great personal pleasure. How much more enjoyment do people derive from travel, books and movies when they know about the history that shaped the places they visit, or the stories they read or watch on a screen?

11.2.3 Sources

Evidence consists of factual information that verifies or disproves an event. It can come from various sources and is crucial for verifying or refuting historical events.

Sources

Sources are any written or non-written materials that can be used to investigate and provide information about the past. It is important to make use of sources from the time we are studying, and after the time, to explore the different points of view, or perspectives, of people from the past.

Primary and secondary sources

Historians can use two types of sources to investigate events from the past.

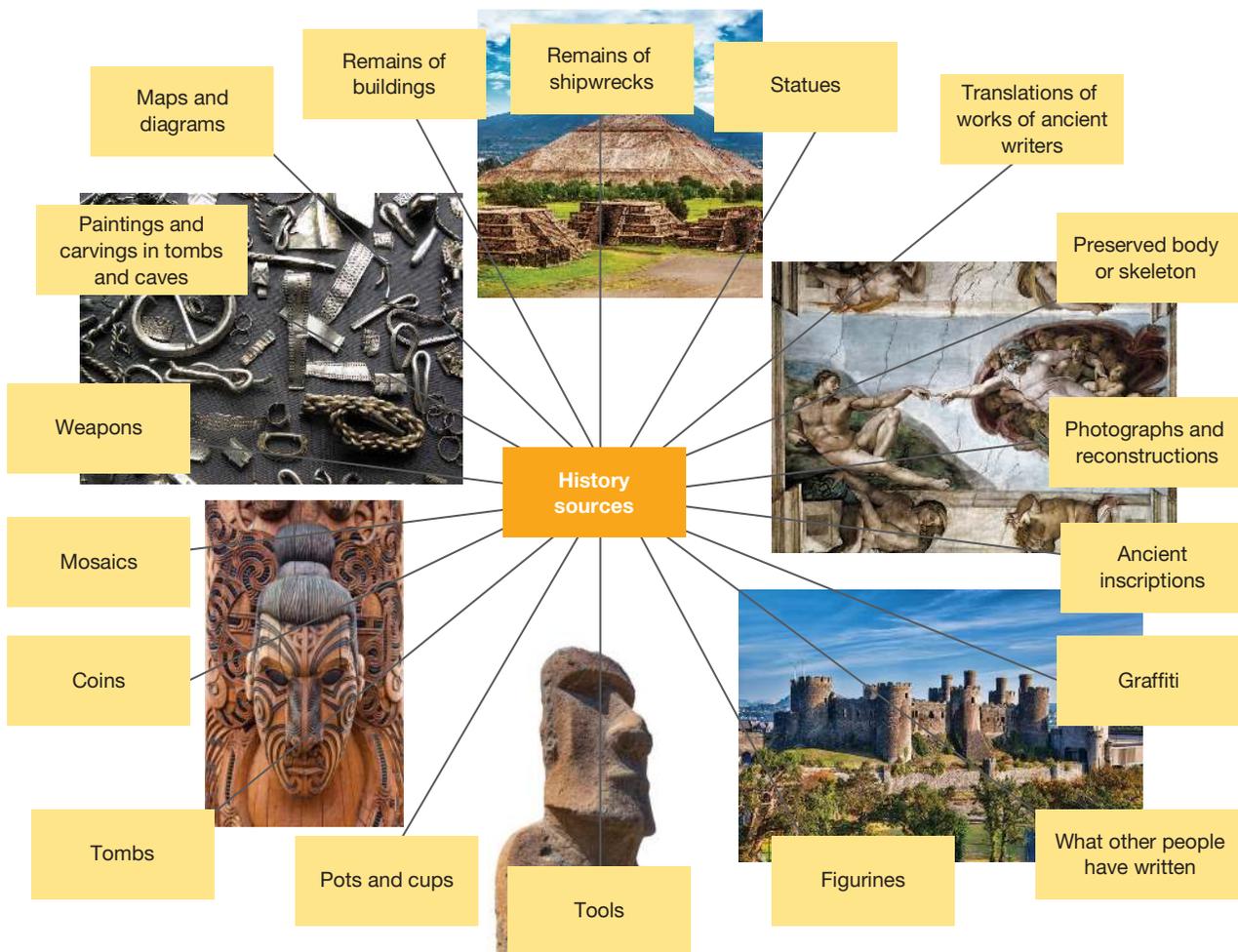
- **Primary sources** were created or written in the period that the historian is investigating.
- **Secondary sources** are written or created by people living after the period that the historian is studying.

Primary sources might include bones, stone tools, art, photographs or many other traces. Written primary sources can include such things as poems, songs, letters, newspapers, speeches, myths and legends.

Secondary sources can include books, articles, websites, models, **timelines**, computer software and documentary films. To create secondary sources, historians often:

- locate information in primary sources
- interpret that information
- use it to explain what happened.

SOURCE 2 The many different types of primary sources



11.2.4 Evidence

Evidence refers to the available facts that indicate whether something is true or that it really happened. Evidence can come from primary and secondary sources. When using historical sources, historians need to ask questions about each source, such as where the source comes from (origin) and why it was created

(purpose). A source may be fact or someone's opinion — that is, it could be **biased**. One way to test sources for reliability is to compare them to other sources. If this evidence leads to the same conclusion, we call it supporting evidence. If it leads to different conclusions, we have contradictory evidence.

When we use sources to try to find out about the past, we must ask some questions. For example, we might ask:

- What type of source is this?
- Who is the author or creator of this source, and when was it written or created?
- What was the purpose of writing or creating this source?
- What evidence does the source present?
- What were the historical or contextual circumstances at the time of the source's creation?
- Is the source reliable and trustworthy?

11.2.5 Continuity and change

When studying different societies, historians can see that some aspects of life have remained the same over time, while other aspects of life have changed dramatically. This concept is known as 'identifying **continuity and change**'.

Change refers to something that is different from what has occurred in the past. This may occur over a long period of time or may occur dramatically and suddenly.

Continuity refers to the things that endure, relatively unchanged, over time. You will find that many things remain the same across long periods in history. Sometimes these continuities have lasted into modern times.

SOURCE 3 (a) Medieval doctors check for problems by using visual examinations. (b) In contrast, a modern 3D dental scanner creates a detailed image of the jaw.



SkillBuilder discussion

Questioning and researching

1. Consider the area of medicine. Look at the images in **SOURCE 3**. What are the main changes in medicine?
2. What, despite the passage of time, remains the same?

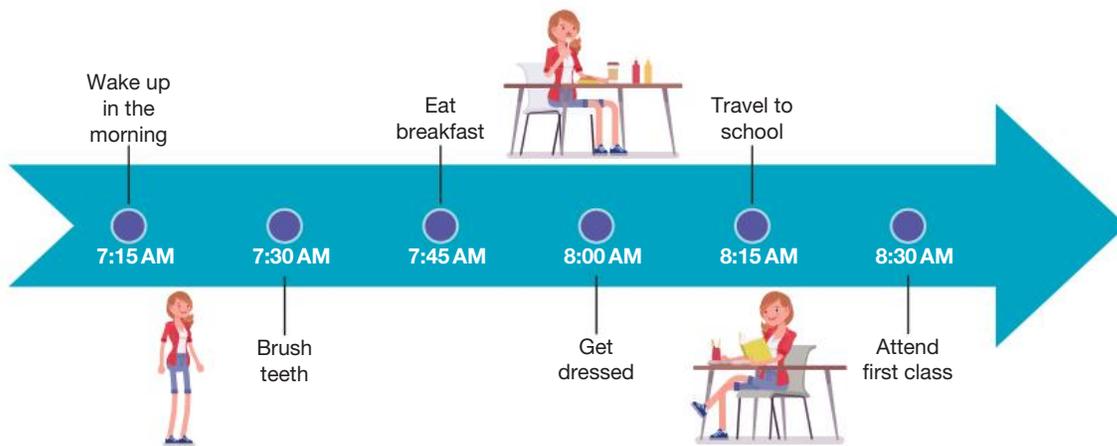
Sequencing, chronology and timelines

Chronology involves recording and sequencing significant events, individuals, ideas and developments in the order they occurred. This systematic approach helps historians and researchers to track the progression of these elements over time, providing a clear understanding of how they interrelate.

By arranging events chronologically, we can explain the continuity and change that occurred throughout a given period, identifying what aspects of society, politics, economy and culture remained constant and what underwent transformation.

Additionally, this chronological sequencing helps in establishing the causes and consequences of events, shedding light on the short-term and long-term impacts they had on various facets of life.

SOURCE 4 A simple timeline representing the sequence of events during a typical morning



11.2.6 Cause and effect

Once historical events have been placed into chronological order, investigating how one event has caused another event and how events are connected becomes easier. We can also look at the developments that have happened in both the short term and over a longer period of time.

In history, events do not simply occur without reason. Every event will have a cause and is likely to result in several effects or consequences. Being able to identify patterns of **cause and effect** is an essential skill for historians that allows them to explain how and why things happened in the past.

Causes may include people, societies, politics, beliefs, economics or any other historical factor. Likewise, effects can include impacts on people, societies, politics, beliefs, economics or any other historical factor. It is important to understand that not all causes leading to a specific event are equally significant — some causes may have more influence than others.

Some causes occur immediately before an event begins, while others may have existed for several years, decades or centuries before the event. Some effects occur immediately after an event or action, while others may occur years, decades or centuries following the event or action.

11.2.7 Perspective

Historians often come across many different versions of the same event. This is because people may have different points of view about what happened, called perspective. Imagine you and some of your friends were asked to describe what happened at a party. You would probably all have a different version of the events, depending on what things you saw and what you consider to be important.

People in the past may have had different points of view about an event, depending on their age, gender, social position and their beliefs and values. We try to understand the **perspectives** of people in the past by exploring their points of view, attitudes and values. Historians also have perspectives, and this can influence their interpretation of the past. Often, we can get a sense of the way people thought and felt through primary sources, such as diaries, or through visiting museums and historical sites.

11.2.8 Empathy

It is important for historians to empathise with the people they study. This means trying to understand how people thought and felt at different times in the past. Using **empathy**, we use evidence to imagine what the past was like for people at the time. We need to think about questions such as:

- Who were these people?
- Where did they live?
- How did they live?
- What mattered to them?
- What did they believe in?
- What did they see, hear, taste, smell and feel?
- What did they fear and what did they hope for?
- Did they have feelings similar to or different from ours?
- Did they all think and feel the same as one another, or did they have differing perspectives?

When historians use empathy it helps them understand people from the past by considering their thoughts, feelings and actions. It is about imagining their lives based on evidence.

11.2.9 Significance

Significance relates to the importance of particular aspects of the past such as events, individuals or groups, developments, ideas or movements and historical sites. We need to make judgements about what is important and what is less important.

When we try to establish the significance of an aspect of the past, we must consider a number of questions. For example:

- To what extent was it relevant to individuals living during that period?
- What was the number of people impacted by it?
- In what ways did it alter individuals' lives?
- For what duration of time were individuals' lives affected?
- How significant and enduring were the consequences?
- How relevant is it to the contemporary world?

SkillBuilder discussion

Analysing

1. List some of the things happening in the world today. These might be political, economic or geographical events.
2. Do you think that the things on your list will be significant 10, 20, 30 or 50 years from now?

11.2.10 Contestability

Wherever historians find sources and whatever methods they use to study the past, there will always be different opinions. This is called **contestability** and it is important in history.

Historical debates happen when there is not enough evidence or when different views lead to different conclusions. Sometimes, little evidence remains of an event, and historians must use what they have to make reasonable guesses. This means their ideas can be debated. Other times, several perspectives of

the same event exist. Historians must look at the evidence and make reasonable judgments about what happened, but these can still be debated. Many historical debates are ongoing, such as the causes of wars and the roles of people, groups and ideas in significant changes.

11.2.11 HASS skills used in History

This year, you will continue to build your ability to use the four broad categories of skills in the Humanities and Social Sciences. The following summaries are to remind you of these four key skills.

TABLE 2 The four HASS skills you will develop in History in Year 8

Skill	Description
Questioning and researching	Locating relevant and detailed information and/or data from a range of appropriate sources. In Year 8 History this includes primary and secondary sources related to Medieval Europe, such as written sources and artwork.
Analysing	Interpreting information to identify the main features or ideas and then examining the information closely to determine how the parts relate to the whole. In Year 8 History this includes looking for patterns of change over time, such as looking at how technology changed society in the Industrial Revolution. You will also build your ability to identify the causes and effects of historical events.
Evaluating	Examining your interpretations of information to draw evidence-based conclusions. It requires taking into account ambiguities and multiple perspectives in a source and proposing potential responses to contemporary challenges or issues. In Year 8 History this includes drawing conclusions about the impact of significant individuals and the ways life was diverse for different groups in society.
Communicating and reflecting	Presenting information in a range of formats to suit the intended audience and purpose. This includes essays, oral presentations, debates, tables and cartoons. Reflecting on your skills is also an important part of the process. In Year 8 History this might include writing from the perspective of different people living in Medieval Europe, role-playing the life of a child factory worker, sketching artwork or creating a timeline of key events and people.

11.2 SkillBuilder activity

QUESTIONING AND RESEARCHING

1. Construct a timeline of Europe between 476 and 1683 CE.
 - a. Use a vertical timeline.
 - b. Divide it into centuries.
 - c. Decide what scale you will use.

Add these key events to your timeline:

1066 CE	William of Normandy wins the Battle of Hastings and becomes King of England.
476 CE	Western Roman Empire ends.
1096 CE	The Crusades start.
711 CE	Islamic forces conquer Spain.
1215 CE	King John of England is forced to sign the Magna Carta.
787 CE	The first recorded Viking raid on England takes place.
1298 CE	Osman I founds the Ottoman Empire.
1347 CE	The Black Death breaks out in Europe.
1429 CE	Joan of Arc drives the English out of Orleans.
1453 CE	Crusades end as the Ottomans take Constantinople.
1529 CE	Advancing Ottoman forces are defeated at Vienna.
1683 CE	Ottoman forces are again defeated in Vienna. Many see this as the beginning of the decline of the Ottoman Empire.

2. Answer the following questions based on the timeline you have drawn.
 - a. What time span does your timeline cover (i.e. how many years in total are covered by your timeline)?
 - b. Which event on your timeline was the earliest?
 - c. How many years elapsed between the start and the end of the Crusades?
 - d. How many years elapsed between the start of the Ottoman Empire and the beginning of its decline?
 - e. What event of significance took place in the fifth century?

11.2 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 3, 4, 8

■ LEVEL 2

2, 5, 6

■ LEVEL 3

7, 9

REMEMBER AND UNDERSTAND

1. Which of the following lists best represents the Historical concepts?
 - A. Innovation, Migration, Invasion, Democracy, Trade, Economy, Culture
 - B. Sources, Evidence, Continuity and change, Cause and effect, Perspective, Empathy, Significance, Contestability
 - C. Agriculture, Industry, Urbanisation, Exploration, Colonisation, Conflict, Trade
 - D. Chronology, Perspectives, Empathy, Bias, Sources, Primary and secondary sources, Contestability
2. What is involved in sequencing chronology?
 - A. Comparing two different historical events
 - B. Placing historical events in the order they occur
 - C. Explaining why an event is important
 - D. Identifying different perspectives of an event
3. What is the main difference between primary sources and secondary sources?
 - A. Primary sources are written later, while secondary sources are created at the time.
 - B. Primary sources are original, first-hand accounts, while secondary sources are interpretations or analyses of those accounts.
 - C. Primary sources are about science, while secondary sources are about history.
 - D. Primary sources are used in fiction, while secondary sources are used in nonfiction.
4. Provide two examples of written sources and two examples of archaeological sources.
5. **Outline** how historians create secondary sources.

ANALYSE AND APPLY

6. **Explain** why it would be wrong to think that primary sources are always more reliable than secondary sources.
7. Make a list of some kinds of primary sources that could be used to create a history of your school (a secondary source). Next to each source in your list, write what you think you could find out by using it as evidence.

EVALUATE AND COMMUNICATE

8. Examine **SOURCE 3**. **Identify** the changes that have occurred in medicine from the medieval times to the modern age.
9. **Discuss** the limitations of both primary and secondary sources.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **develop** key historical questions.

11.3.1 Tell me

What are historical questions?

Historical questions may be asked to evaluate historical sources, examine cause and effect, or outline how or why something happened.

Why are historical questions useful?

Historical questions are useful because they allow us to critically evaluate historical sources, understand the causes and consequences of events, and explore the reasons behind historical occurrences. They guide researchers in their investigation of the past, helping them to construct detailed and accurate narratives. By asking historical questions, we can gain insights into the complexities of history and develop a deeper appreciation for the events that have shaped our world.

SOURCE 1 An example of a historical question

How were communities affected by the Black Death?

11.3.2 Show me

To develop historical questions, you will first need to choose your topic. If your topic is medieval Europe, a good place to start is to think about what you would like to know more about.

Step 1

Create a list of initial questions about a specific historical event — in this example, we could focus on how medieval Europe was affected by the Black Death. For example:

- How did the Black Death impact the daily lives of people in medieval Europe?
- What were the social and economic consequences of the Black Death on European communities?
- How did medical knowledge and practices of the time contribute to the spread or containment of the Black Death?
- What role did religion and the Church play in shaping public responses to the Black Death?
- How did the Black Death influence art, literature and cultural expressions in medieval Europe?

Step 2

To answer the questions that you have developed, you will need to have a source to help you.

SOURCE 2 The bubonic plague was so named because of the appearance of 'buboes', which were swellings of the lymph nodes.



You may wish to use other sources in this resource or you might find additional ones from your own research.

11.3.3 Let me do it

Complete the following activities in small groups to practise this skill.

11.3 ACTIVITIES QUESTIONING AND RESEARCHING

1. Decide on a topic from history that you would like to inquire about to find out more.
2. Mind-map a list of initial questions about this historical event, such as what caused it or what was it like.
3.
 - a. Locate a range of (2–3) historical sources related to the event.
 - b. **Evaluate** the sources and determine if the initial questions can be answered with the available evidence.
 - c. Based on your evaluation, you may wish to refine your initial questions by introducing some other historical concepts and skills, such as cause, effect, continuity and change. Present your list of improved questions to your class.
 - d. **Discuss** how the questions have evolved and how they better address your initial historical 'inquiry'.

LESSON 11.4 SkillBuilder: Chronology

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **sequence** events in chronological order.

11.4.1 Tell me

What is a timeline?

A timeline is a diagrammatic tool for placing events in chronological order (the order in which they happened). A simple chronology would be one, for example, that showed in sequence, or time order, key events of a day in your life.

Why are timelines useful?

SOURCE 1 A simple chronology

DIARY AND WORK RECORD	
8 0800	
9 0900	Tennis lessons
10 1000	
11 1100	Haircut
12 1200	
1 1300	Lunch with Luke
2 1400	
3 1500	
4 1600	Homework - Geography assignment
5 1700	
6 1800	

Timelines are useful because they can help us make sense of events in the past. Timelines are particularly useful in the study of history. Creating a history timeline will help to:

- understand the order in which events occurred
- describe the time distances between events
- identify what has changed over time
- identify what has stayed the same over time
- analyse how one event might relate to other events
- compare what might have been happening in different places at the same time
- assess whether one event might have led to another event (cause and effect).

Generally, timelines are constructed using a sequence of dates with the addition of descriptive labels. The timeline may span thousands of years or cover a very short period. In print, timelines may be as simple as a horizontal or vertical line, or highly visual with use of colour and images. Using digital technology, online timelines can be interactive, whereby users click on a date to see a descriptive label, an image or hear an audio narrative or sound effects.

SOURCE 2 A simple horizontal timeline of a specific historical period

Cosimo de' Medici inherits Medici Bank



1429

Gutenberg Bible is published



1454

Columbus reaches the Bahamas



1492

Michelangelo finishes "David"



1504

Machiavelli publishes "The Prince"



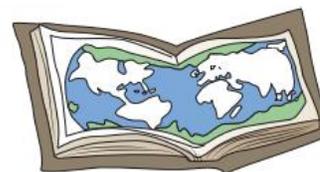
1513

The Peace of Augsburg



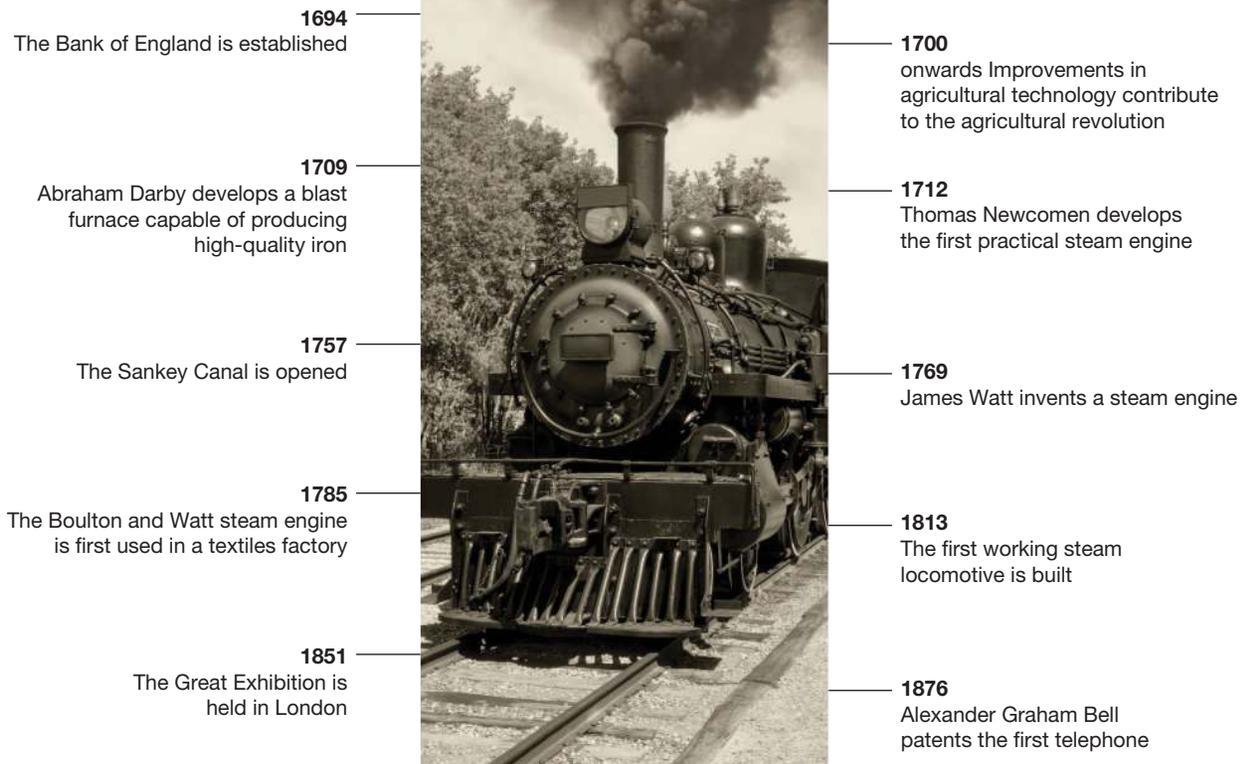
1555

First modern atlas is published



1570

SOURCE 3 A simple vertical timeline



11.4.2 Show me

How to create a timeline

Timelines can cover very short or very long periods of time. They have the following features and requirements:

- They can focus on just a few months or years.
- They can focus on big, sweeping changes over thousands of years.
- In most cases, they are divided up into equal blocks of time, such as decades or centuries.
- This is not essential, but it helps us to see not only the order of events but also how close or how far apart they were.
- A break in the timeline (shown using a zigzag line, for instance) can show a long span of time between one date and the next.
- To make equal blocks of time, you need to use a scale — for example, 1 centimetre = 10 years.
- Timelines can be horizontal (across the page), with the earliest dates on the left and latest dates to the right.
- Alternatively, they can be vertical (down the page), in which case the dates usually run from the earliest at the top to the latest at the bottom.
- Often, we have only approximate dates for events in **ancient history**. In those cases, we put 'c.' in front of the date. This stands for the **Latin** word *circa*, which means 'around' or 'about'.

Step 1

Study the timelines shown in **SOURCES 2** and **3**. Look at the way these timelines have been constructed.

Step 2

A completed timeline has a clear title.

The title should state:

- the time period covered
- the subject or theme
- the beginning and end dates.

11.4.3 Let me do it

Complete the following activities to practise this skill.

11.4 SkillBuilder activity ANALYSING

1. **Construct** a timeline of key events during the periods covered in Year 9 — The Industrial Revolution (1750–1914).
 - Use a vertical timeline.
 - Divide it into centuries.
 - Decide on the scale you will use.

Key events for your timeline	
1765	The American Revolution begins.
1769	James Watt invents a steam engine capable of providing continuous power.
1783	The Treaty of Paris is signed, formally ending the American Revolution.
1788	The First Fleet arrives in Botany Bay.
1789	The French Revolution begins.
1793	Eli Whitney invents the cotton gin.
1799	Napoleon Bonaparte stages a coup d'état, marking the end of the French Revolution.
1830	Stephenson's Rocket hauls the first train on the Manchester-to-Liverpool railway line.
1833	The Slavery Abolition Act abolishes slavery throughout the British Empire.
1834	The Poor Law Amendment Act forces the poor to live in workhouses.
1838	The First Opium War begins.
1851	Gold is discovered in the newly named Colony of Victoria.
1861	The American Civil War begins.
1863	President Abraham Lincoln signs the Emancipation Proclamation, officially freeing the slaves in the United States.
1865	The American Civil War ends.
1874	British Parliament passes the Factory Act, setting maximum allowable working hours per week for all workers.
1876	Alexander Graham Bell patents the first telephone.

Your timeline will help you to **analyse** and **compare** events.

2. Answer the following questions based on the timeline you have drawn.
 - a. What time span does your timeline cover? (That is, how many years in total are covered by your timeline.)
 - b. How many years elapsed between the start and the end of the French Revolution?
 - c. Which came first — the American Revolution or the French Revolution? What period of time separated the two historical events?
 - d. **Identify** three significant events during the period of time illustrated on the timeline for:
 - i. Britain
 - ii. Australia.

LEARNING INTENTION

By the end of this SkillBuilder you should be able to:

- **identify** and **explain** differing points of view about a historical event or issue
- **propose** likely reasons for the differing perspectives.

11.5.1 Tell me

What is perspective?

A historical **perspective** provides a viewpoint from which historical events, challenges and issues can be examined. For instance, the perspective of a factory owner in the early nineteenth century would differ significantly from that of a child employed in the same factory. Additionally, our contemporary view of certain events may be very different to how they were perceived in the past. For example, it is now expected that children attend school from the age of five or six until their mid to late teens. However, 200 years ago in Britain and most other European countries, only the children of affluent families received an education. Most children were required to work to support their families as soon as they were physically able. Our modern perspective on child labour is very different from that of individuals living in the late eighteenth or early nineteenth centuries.

Why is it important to recognise a historical perspective?

Understanding any historical event or issue means recognising the perspectives or biases within it. Achieving an accurate representation of any historical event or issue means looking at accounts from a range of perspectives.

11.5.2 Show me

How to identify or recognise historical perspective

Historians research individuals to understand their perspectives on various topics. During the Industrial Revolution, factory reformers like Robert Owen advocated for better working conditions and pay. By studying Owen's writings and actions, historians can infer that a factory praised by Owen likely followed his suggestions or resembled his New Lanark mills. While Owen's perspective is well-documented, understanding another factory owner's views requires similar in-depth research to identify potential biases.

Example 1: Identifying historical perspective in a painting

Step 1: Identify the context

William Bell Scott was a nineteenth-century painter, and one of the first to produce paintings celebrating the achievements of the Industrial Revolution. His most famous work, *In the nineteenth century the Northumbrians show the world what can be done with iron and coal* (see **SOURCE 1**), was painted in 1861, and contains a broad range of activities associated with the industrial changes that had occurred in Britain during the previous hundred years. It was one of a series of paintings produced for a wealthy family in Northumberland. Bell Scott had visited Robert Stephenson's engineering workshop in Newcastle in the county of Northumberland.

SOURCE 1 Bell Scott's painting, *In the nineteenth century the Northumbrians show the world what can be done with iron and coal* (1861), celebrating the achievements of the Industrial Revolution



Step 2: Look for features that stand out

When we analyse the painting, several features stand out.

- Three working men with large hammers appear ready to strike something, possibly a locomotive wheel.
- A fourth man is visible in the background, also engaged in work.
- The men are powerfully built, representing the ideal British worker — strong and determined.
- They do not appear undernourished, ill or exploited.
- In the bottom right corner, a newspaper covers a drawing of a locomotive built by Robert and George Stephenson.
- A similar locomotive is seen crossing an iron bridge, identical to Robert Stephenson's bridge over the Tyne River.
- The foreground features include an iron anchor, a marine pump, an artillery barrel and a pile of artillery shells.

Step 3: Consider what perspective the features convey when viewed as a whole

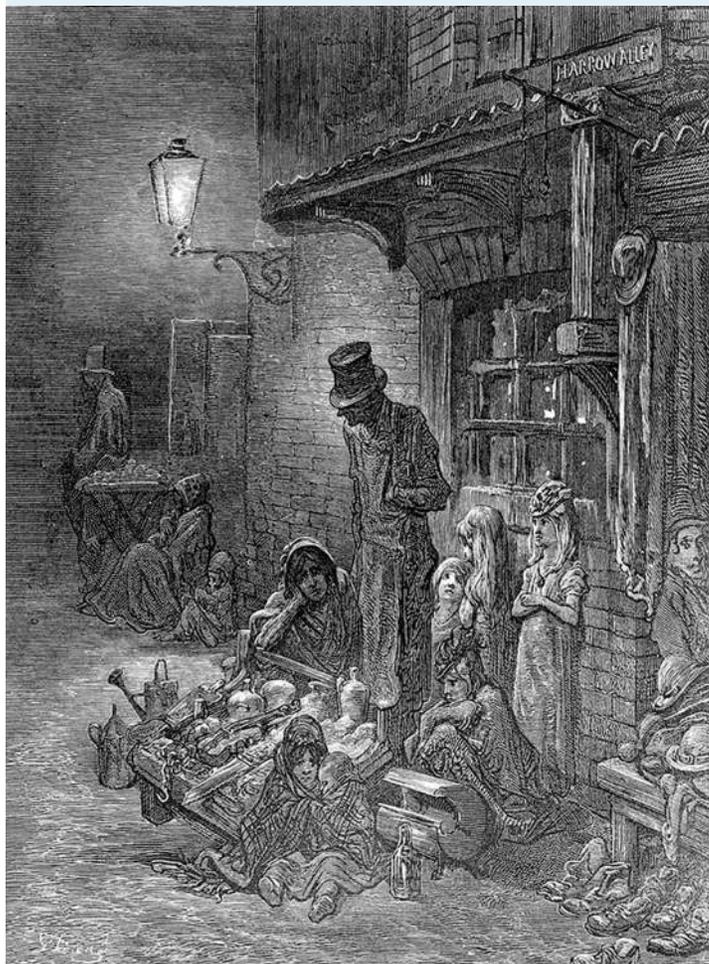
This painting highlights Britain's military and naval prowess. A healthy, well-fed little girl, possibly a workman's daughter, holds a lunch package and a schoolbook, indicating her education. Education for working-class children was an ideal in Victorian England. Behind her, a boy with a miner's lamp suggests he works in the mines but he appears healthy and well-dressed. The river scene includes steamships, sailing ships and a coal barge, emphasising Northumbria's reliance on coal. Dockside activity includes two businessmen, a woman with a pail and other busy figures. Telegraph poles across the top symbolise industrial advancements in communication. Overall, the painting positively depicts the Industrial Revolution's impact.

Example 2: Identifying historical perspective in an engraving from a book

Step 1: Identify the context

William Blanchard Jerrold was a writer and journalist. In 1869 he collaborated with French artist Gustave Doré to produce a book called *London: A pilgrimage*. Published in 1872, this book featured descriptions and drawings of many of the poorest parts of London and its people. It included 180 engravings by Doré showing slum areas and the extreme poverty of much of the population (see **SOURCE 2**). Jerrold and Doré were accused by many of showing only the worst aspects of London, but they clearly wanted to make their readers more aware of the conditions suffered by the poor.

SOURCE 2 This engraving by Gustave Doré of a scene in the London street of Houndsditch appeared in *London: A pilgrimage* in 1872.



Step 2: Look for features that stand out

- The illustration from Jerrold and Doré's book shows a poor family trying to sell trinkets on the street.
- The entire family, including seven children, appears thin and poorly clothed.
- The street depicted looks dark and dirty.
- Another family is shown in a similar situation further down the street.

Step 3: Consider what perspective the features convey when viewed as a whole

The fact that the whole family is present suggests they may be homeless. The whole scene is designed to show just how upsetting and widespread poverty could be on the streets of London. When we understand Doré's perspective we realise that he may have deliberately exaggerated the scene to get his message across to the reader.

11.5.3 Let me do it

Complete the following activity to practise this skill.

11.5 SkillBuilder activity **EVALUATING**

1. Examine **SOURCE 3**. Complete the following steps to identify the perspective of the photographer.
 - a. Step 1: **Identify** and **describe** the context.
 - b. Step 2: **Describe** features that stand out.
 - c. Step 3: Consider what perspective the features convey when viewed as a whole.

SOURCE 3 Dust-covered coal-mining breaker boys; their job was to break coal into pieces, sort them by size and separate any impurities (rocks or other materials), all by hand. This was deemed unskilled work, so it was usually undertaken by the youngest workers.



2. **Examine SOURCES 4 to 6.** The steps in identifying perspectives in written texts is the same as in a visual texts, but instead of looking for visual details, you look closely at the language (how it suggests point of view with emotive words or bias) and examples. For each quote, complete the following steps to identify the perspective of the writer.

- a. Step 1: **Identify** the context. Find out as much as you can from the school library or the internet about the author and write a brief statement about that person's perspective in relation to child labour in mines and factories. Consider the following questions in your research:
 - i. Who are they?
 - ii. When are they writing?
 - iii. Why are they writing about it?
- b. Step 2: Look for features that stand out. **Identify** words that reflect the emotion the writer feels for the people (e.g. exhausted rather than sleepy). Are there words that show how the writer feels about the situation? (e.g. lesser evil rather than better choice)
- c. Step 3: **Evaluate** what perspective the features convey when viewed as a whole. What are they trying to achieve or what point are they trying to make?

Explain how the quote demonstrates that perspective.

SOURCE 4 From Michael Sadler, in a speech in the House of Commons, 16 March 1832

The parents rouse them in the morning and receive them tired and exhausted after the day has closed; they see them droop and sicken, and, in many cases, become cripples and die, before they reach their prime; and they do all this, because they must otherwise starve. It is a mockery to contend that these parents have a choice. They choose the lesser evil, and reluctantly resign their offspring to the captivity and pollution of the mill.

SOURCE 5 Henry 'Orator' Hunt, in a speech in the House of Commons, 16 March 1832

The question is, whether the children of the manufacturing poor should work for more hours than human nature can sustain. If the honourable members were to see hundreds of the poor, unfortunate wretches employed in the cotton-mills in Lancashire, they would feel the absolute necessity of adopting an active interference. I say, let the manufacturer keep double the number of workmen, but do not let him destroy the health of the rising generation.

SOURCE 6 Henry Thomas Hope, in a speech in the House of Commons, 16 March 1832

The right honourable member [Michael Sadler] seems to consider that it is desirable for adults to replace children. I cannot concur with that opinion, because I think that the labour of children is a great resource to their parents and of great benefit to themselves. I therefore, on these grounds, oppose this measure ... I believe that the bill will be productive of great inconvenience, not only to persons who have embarked large capital in the cotton manufactures, but even to workmen and children themselves ...

3. Based on what you have learned in this lesson apply your skill in analysing different perspectives to answer the following questions.

- a. Which extract (**SOURCE 4, 5 or 6**) do you find most convincing? Why?
- b. For each extract, **identify** the values or beliefs the author is revealing.
- c. For each extract, **identify** what benefit the author stands to gain if their point of view is persuasive.

LEARNING INTENTION

By the end of this Skillbuilder you should be able to use historical sources.

11.6.1 Tell me

What are works of art?

Works of art are one common type of primary source. Throughout this topic we have examined various primary sources: artworks, monuments, buildings and written sources. Artworks include paintings, sculptures, bas reliefs and mosaics. Art styles changed significantly throughout the Middle Ages, and differed from kingdom to kingdom.

Why is analysing artwork useful?

Artwork can tell us a great deal about a particular period or event. It may also tell us what ideas, beliefs or activities people felt were important enough to express in artwork. For example, an elaborately carved altarpiece in a church tells us that much attention was given to expressing the Christian faith during the Middle Ages.

11.6.2 Show me

How to analyse a work of art

A useful way to approach the task of analysing a work of art is remembering to use ‘the three Cs’ – content, context and comment.

Content

The content is what the artwork actually shows. Look at it very carefully and make sure you note all the details. For example, you might need to look for particular symbols or gestures. Think about how you would describe the image to someone who has not seen it; that way you can be sure you have looked at it thoroughly.

Context

Context refers to what was happening at the time the artwork was created – the historical background. Try to find out about the origin and purpose of the artwork: who created it, and why? Is it a primary or a secondary source? Knowing this can reveal as much as the artwork itself. The detail from the Mariacki altar in **SOURCE 1** was created by an artist called Wit Stwosz. The artist and his team were commissioned to create this altarpiece for the Church of Our Lady in Kraków, Poland. During the Middle Ages, artists were frequently employed to create artworks with religious themes. This altarpiece shows various saints, the ascension of the Virgin Mary into heaven and scenes from the life of Jesus. At the time of its creation in the Late Middle Ages, it was the largest altarpiece in the world.

Comment

You should question the value of every source. Why is it useful? Does it give you raw information or does it show only a particular point of view? Are there any limitations to the source – that is, is there anything the illustration cannot tell you? Do you think it is a reliable source? Why or why not? Remember, the origin and purpose of any historical source will always influence its value and limitations.

SOURCE 1 A detail from the Mariacki altar in the Church of Our Lady in Kraków, Poland, showing the arrest of Jesus. It was carved by Wit Stwosz in the late fifteenth century.

Content

In one scene on the altarpiece depicting Jesus' arrest, the figures, except Jesus, wear attire familiar to the artist's time and place, from late fifteenth-century Europe. The soldier appears as a knight of the Late Middle Ages, not a Roman soldier from the first century CE. The buildings in the background also reflect the late fifteenth century. Before modern archaeology, artists depicted historical scenes with contemporary clothing and objects due to limited knowledge of past societies.

Context

The Church was a powerful and important institution in medieval Europe. Great expense went into embellishing churches with works of art such as this. Artists were commissioned to undertake such projects and employed people to help them in their task.



Comment

Can we trust this image? We can trust this image to reflect the significance of religious artworks to the Church in the Middle Ages. However, it is not an accurate depiction of how things looked during Jesus' time. As students of the Middle Ages, we can trust that the artist used contemporary models to create these images. Therefore, it accurately represents the attire and objects of late medieval Europe, including knights' armour, headdresses, coats, and belts common to that era.

If you ask these questions each time you analyse an artwork, you'll be on your way to becoming an effective historian. In the following example, the three Cs have been applied to **SOURCE 1**.

11.6.3 Let me do it

Complete the following activities to practise this skill.

11.6 ACTIVITIES ANALYSING

1. Look at **SOURCE 2** and analyse it by completing the tasks below.
 - a. Describe what is happening in the artwork.
 - b. What impression is the artist trying to make about the subject of the artwork (the nuns)?
 - c. What are the figures doing? What are the various activities? Can you identify the different roles among the figures?
 - d. What sort of problems in dealing with historical sources do your answers to the above questions highlight?

SOURCE 2 A French illustration depicting nuns looking after the sick



2. You have learnt some of the history behind **SOURCE 1** and the sort of information it presents. This helped assess its usefulness as a source. You should now be able to think about the effectiveness of **SOURCE 2** as a historical source by answering the following questions.
 - a. It is fairly certain that **SOURCE 2** was created under the direction of Church authorities. Perhaps members of the clergy created it. How might that influence the way the nuns are presented?
 - b. If this was the only source available on the role of nuns in the medieval Church, what conclusions might you draw? Would all your findings be accurate?
 - c. Why must historians be careful when looking at sources such as this?
The types of questions you have asked about **SOURCE 2** can be used for any medieval artwork — in fact, they can be used to analyse artwork from any era. Keep them in mind whenever you are looking at history through artwork.
3. Based on your work interpreting sources on medieval Europe, answer the following questions.
 - a. What types of artworks are categorised under the term 'medieval artworks'?
 - b. What does it mean to explore the content of an artwork?
 - c. Explain what exploring the context of a medieval artwork requires historians to do.
 - d. How can analysing medieval artwork be useful to historians?

LESSON 11.7 SkillBuilder: Continuity and change

online only

What does 'explain continuity and change' mean when studying history?

When we study history, we try to understand how certain elements have persisted over time and how others have transformed. Continuity refers to aspects of the past that have remained relatively unchanged, while change refers to the evolution or transformation of other components over time.

LESSON 11.8 Review

11.8.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

11.2 History concepts and skills

- Historians investigate and interpret the past.
- History helps us to understand our heritage and appreciate other cultures.
- History helps us to understand the present and what the future may hold.
- History provides us with essential skills.
- You will learn eight historical concepts throughout your history course.
 - *Sources*: This involves any written or non-written materials that can be used to investigate and provide information about the past.
The two types of sources are primary sources, which come directly from the time of the event, and secondary sources, which are written or created after the event has already happened.
 - *Evidence*: Using historical sources as evidence relates to analysing sources to judge how reliable they are, and exploring the different points of view, or perspectives, of the people from the past. Using evidence from sources, historians can form a hypothesis (a possible theory to explain what happened).
 - *Continuity and change*: This involves being able to recognise that while many changes occur over time, some things remain constant.
Historians often use sequencing of events and create timelines in order to study the changes that have happened over time.
Historians divide the past into ages and periods.
 - *Cause and effect*: Using chronological order and timelines helps us to recognise cause and effect. Analysing cause and effect relates to understanding that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences.
 - *Perspective*: This is the different points of view that people may have of an event.
We try to understand the different perspectives of people in the past by exploring their points of view, attitudes and values.
Historians also have their own perspectives, which can influence the way they see the past.
 - *Empathy*: Historians try to discover how people thought and felt in the past.
We should avoid judging people from the past by the standards of our own age.
Using historical imagination requires using your imagination, but basing your ideas on evidence.
 - *Significance*: Determining historical significance is being able to make judgements about the importance assigned to particular aspects of the past; for example, events, developments, movements and historical sites.
Historians will often have differing opinions about how significant certain things are.
 - *Contestability*: When attempting to interpret the past, differing interpretations will always exist, and these can be debated and contested. Sometimes evidence is available that supports different versions of events and, in these cases, historians must make a judgement based on the evidence as to what most likely happened.
- The HASS skills used in Year 8 are questioning and researching, analysing, evaluating, and communicating and reflecting.

11.8.2 Key terms

ancient history the period from the beginning of civilisation to the fall of the Roman Empire

biased one-sided or prejudiced; seeing something from just one point of view

cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences

chronology a record of past events in order of time, from ancient Greek *chronos* (time) and *logos* (word)

civilisations societies that have towns and features such as complex forms of government and religion

contestability when particular interpretations of the past are open to debate

continuity and change the concept that while many changes occur over time, some things remain constant

empathy understanding how someone else might feel or think, especially when learning about people's experiences in the past

evidence information that is used to show why a hypothesis, opinion or explanation is correct

Latin the language of ancient Rome and its empire

perspective a point of view, way of thinking, opinion or belief about an issue, event or thing

primary sources objects and documents that were created or written in the period of time that the historian is investigating

secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying

significance the importance assigned to particular aspects of the past; for example, events, developments, movements and historical sites

timeline a diagrammatic tool representing a period of time, on which events are placed in chronological order

11.8.3 Reflection

Complete the following to reflect on your learning.

Revisit the Inquiry question posed in the Overview:

Why are the Medieval world and the Industrial Revolution important to study, and what skills do I need to understand this history?

1. Now that you have completed this topic, what is your view on the questions? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to one of the inquiry questions, outlining your views.

learn on



eWorksheets

Customisable worksheets for this topic

Reflection



Digital document

Key terms glossary

11.8 Review exercise

Learning pathways

■ LEVEL 1

1, 2, 3, 6

■ LEVEL 2

4, 7, 8, 10

■ LEVEL 3

5, 9

REMEMBER AND UNDERSTAND

- Chronological order means:
 - a timeline.
 - in order from the beginning to the end.
 - any random order.
 - from the end to the beginning.
- The work of historians can be described like that of detectives because:
 - historians solve crimes.
 - historians are always right.
 - historians never make mistakes.
 - historians gather evidence from sources and interpret that evidence.
- Primary sources are:
 - sources that were created during the time being studied.
 - sources that came first.
 - secondary sources.
 - books.
- Identify which of the following concepts of history refers to the facts and information available to historians.
 - Perspective
 - Evidence
 - Cause and effect
 - Empathy
- The concept of history 'continuity and change' refers to:
 - the study of aspects of history that have remained relatively unchanged and the aspects that have changed dramatically.
 - studying written or non-written materials that can be used to provide information about the past.
 - historians trying to discover how people thought and felt in the past.
 - the ability to make judgements about the importance assigned to particular aspects of the past.

ANALYSE AND APPLY

- In your own words, **explain** what the term *supporting evidence* means.
- What is a hypothesis?
- Historians use sources to help them understand the past. **Describe** four examples of historical sources from the Industrial Revolution and Medieval Europe.

EVALUATE AND COMMUNICATE

- Choose two images from Topic 11 and **evaluate** the usefulness of these for understanding the day to day experiences of people.
- Explain why primary sources are often used in museum displays.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this SkillBuilder you should be able to:

- **identify** moments or periods of historical change
- **suggest** the extent of their impact.

11.7.1 Tell me

What is continuity and change?

Societies around the world evolve and adapt to challenges. However, there are periods when change occurs slowly, and certain aspects of society remain constant, creating continuity. For example, before the Industrial Revolution, farming practices in Britain remained largely unchanged for centuries, illustrating long-term continuity. In contrast, during the eighteenth century, farming underwent rapid transformation with the introduction of four-crop rotation, enclosures, and new technology for sowing and harvesting. These changes occurred within less than 100 years, highlighting a period of significant and rapid change.

Why is continuity and change important?

Recognising moments of continuity and change helps historians understand how societies develop over time. By identifying when changes occur, how quickly they happen and their impact, historians can assess the significance of historical events. Understanding these patterns provides insight into the forces that shape societies, allowing for a deeper appreciation of the past and its influence on the present.

11.7.2 Show me

How to identify continuity and change

Continuity and change within society can be identified by examining a variety of historical sources. Contemporary writers and artists often record rapid change happening around them. Statistics from the period in question can often inform us of dramatic or significant change. Look at the statistical tables in the subtopics covering the Industrial Revolution. In each case the figures demonstrate periods of significant change through the Industrial Revolution. They contrast with statistics from previous centuries that indicate very little change over long periods of time.

To identify continuity and change, consider the following questions:

- What specific changes occurred, and in what areas of society or technology?
- Over what timeframe did these changes take place, and were there any key events that accelerated or slowed them down?
- What was the magnitude of the changes, and how did they compare to previous historical periods?
- What were the short-term and long-term impacts of these changes on different groups within society?
- How widespread was the impact of these changes, both geographically and socially?

Examining an example: The growth of the railways

One dramatic change that occurred during the period of the Industrial Revolution was the development of the railways. In 1825 and 1830, the first railway lines were experiments in attempting to use steam power to transport goods and people. Within 50 years, railway lines crisscrossed all of Britain and rail travel had become a major form of transport.

Consider the following question: 'To what extent did the development of the railways bring significant change to the way of life of people in Britain?' We can begin to answer this question by examining the following historical sources.

SOURCE 1 Transport capability by horse drawn carriage in 1836 and train in 1850

Method of transport	Tonnage carried	Distance travelled in a day
Horse-drawn cart	2 tonnes	30 kilometres
Railways	40 tonnes	300 kilometres

Source: BBC.

SOURCE 2 Journey times from London (in hours)

Destination	By horse-drawn carriage (1836)	By train (1850)
Edinburgh	43	12
Liverpool	24	7
Exeter	18	5
Birmingham	11	3
Brighton	6	1.5

Source: BBC.

SOURCE 3 Total British railway length (km)

Year	Total length
1840	3 000
1845	4 000
1850	10 000
1860	14 000
1880	25 000
1900	30 000

Source: Derived from bbc.co.uk © 2011 BBC.

SOURCE 4 Number of passengers carried

Year	Total population	Total number of passengers carried
1845	18 million	30 million
1900	32 million	1100 million

Source: Derived from bbc.co.uk © 2011 BBC.

SOURCE 5 A description of a major railway junction on the outskirts of London in 1876 from Anthony Trollope, *The Prime Minister*, 1876

It is quite unnecessary to describe the Tenway Junction, as everybody knows it. From this spot, some six or seven miles distant from London, lines diverge east, west, and north, north-east, and north-west, round the metropolis in every direction, and with direct communication with every other line in out of London. It is a marvellous place, quite unintelligible to be uninitiated, and yet daily used by thousands who only know that when they get there, they are to do what some-one tells them. The space occupied by the convergent rails seems to be sufficient for a large farm. And these rails always run one into another with sloping points, and cross passages, mysterious meandering sidings, till it seems to be thoughtful stranger to be impossible that the best trained engine should know its own line.

What conclusions can we draw from these sources in response to the above question? Look first at **SOURCE 1**. The changes, impact and conclusion have been summarised in a table.

The main changes to railways and impacts on the people of Britain according to **SOURCE 1**

Change	Impact	Conclusion
Train hauling goods wagons: 20 times the weight of goods as a horse-drawn cart, ten times the distance in a day	Raw materials and finished goods transported more cheaply, fresh food transported to cities	Access to cheaper goods and greater variety of food
Railway line increase: From 3000 to 30 000 kilometres between 1860 and 1900	Greater volumes and speed of transportation	Significant and lasting change to the way of life in Britain

SOURCE 2 allows us to draw similar conclusions about the level of changes to people's way of life.

- *What change occurred?* How quickly and over what scale? Before the nineteenth century, most people did not travel far from their hometown or village. The railway allowed people to travel more easily and quickly.
- *What was the impact of the change?* With the ability to travel to other towns and cities in around a quarter to a third of the time, people became more mobile and travelled greater distances, to find work or for other purposes.

SOURCES 3 and **4** help us draw similar conclusions

TABLE 1 The main changes to railways and impacts on the people of Britain according to **SOURCE 3** and **4**.

Change	Impact of the change	Conclusion
By the middle of the nineteenth century, most of Britain was accessible by rail with all major cities connected. By the end of the century, few places in Britain were more than a few kilometres from a railway line or station.	In 1845, railways carried 30 million passengers with a population of 18 million (1.6 rail journeys per head). By 1900, this grew to 34 rail journeys per head of population.	This level of use indicates a major change in the way of life of the British people in little over half a century.

Anthony Trollope's description in **SOURCE 5** carries additional implications.

- *What change occurred?* How quickly and over what scale? Trollope was born in 1815, so he was 60 years old when he wrote these words. He had grown up in the era before the railways, and had lived through the period of its greatest expansion.
- *What was the impact of the change?* His description of the junction as a 'marvellous place' and 'quite unintelligible to the uninitiated' is an indication of his amazement at the rail system and the way it had grown so rapidly. Most people of his age would have had similar feelings about this new technology.

Conclusion: This extract also tells us how sophisticated the system had become by 1876, with large rail junctions controlling dozens of trains going in all directions across the country.

Each of these sources tells us of a revolutionary rail transport system that not only captured the imagination of people in Britain (and ultimately around the world), but also brought major changes to people's way of life. So efficient and effective was rail transport that it is still a highly favoured means of transport today. This change that occurred so rapidly in the nineteenth century has continued to influence our lives even in the twenty-first century.

11.7.3 Let me do it

Complete the following activity to practise this skill.

11.7 SkillBuilder activity

1. Using the example above as a model, and **SOURCES 6, 7 and 8**, **explain** the relationship between the following significant changes that occurred in Britain during the nineteenth century:
 - improvements in coalmining
 - the use of steam power
 - the growth of the textile industry
 - rapid increases in the population of particular cities.

Consider the following questions in your answer:

 - a. What change occurred? How quickly and over what scale?
 - b. What was the impact of the change?
 - c. What conclusions can you draw about the individual change?
 - d. What conclusion can you draw about all the changes when considered together?
2. Based on what you have learned in this lesson, **apply** your skill in identifying continuity and change to respond to the following:
 - a. **Outline** two changes caused by improvements in coal mining.
 - b. How did the development of steam power affect the location of textile factories?
 - c. What general conclusions about the changes in population patterns can you draw from the sources in this lesson?

SOURCE 6 A map of Britain showing the location of major coalfields



Source: Spatial Vision.

SOURCE 7 Number of cotton mills in Great Britain, 1787 and 1835

County	1787	1835		
		Operating	Empty	People employed
Berkshire	2	—	—	—
Cheshire	8	109	7	31 512
Cumberland	—	13	—	1658
Derbyshire	22	93	3	11 585
Durham	—	1	—	33
Lancashire	41	683	32	122 415
Leicestershire	—	6	—	592
Middlesex	—	7	—	350
Nottinghamshire	17	20	—	1723
Staffordshire	—	13	—	2048
Westmorland	5	—	—	—
Yorkshire	11	126	—	11 211

Source: From R. Burn, *Statistics of the Cotton Trade* (1847), p. 26; in A. Aspinall and E. Anthony Smith (eds), *English Historical Documents*, XI, 1783–1832, Oxford University Press, New York, 1959, p. 512.

SOURCE 8 Population growth in major English cities 1750–1861

Town/city	1750 (estimated)	1801	1861
London	675 000	959 000	2 804 000
Bristol	45 000	64 000	154 100
Birmingham	24 000	74 000	296 000
Liverpool	22 000	80 000	443 900
Manchester	18 000	90 000	338 300
Leeds	16 000	53 000	207 200
Sheffield	12 000	31 000	185 200

Source: British census figures

12 Medieval Europe

LESSON SEQUENCE

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LESSON 12.1 Overview

INQUIRY QUESTION

What were the significant features of life in Medieval Europe?

Some traditions from the Middle Ages still exist today. For instance, Australia, colonised 300 years after the Middle Ages, still has a monarch whose role dates back to that time. Many Australians follow Christianity or Islam, both of which grew during the Middle Ages, and major conflicts involving these religions began then. European countries as we now know them, started to form during this period, and the English language developed significantly. We may no longer have castles or knights, but many traditions, events and nations have their roots in the Middle Ages.

learn on

Pre-test

Online pre-test

eWorkbook

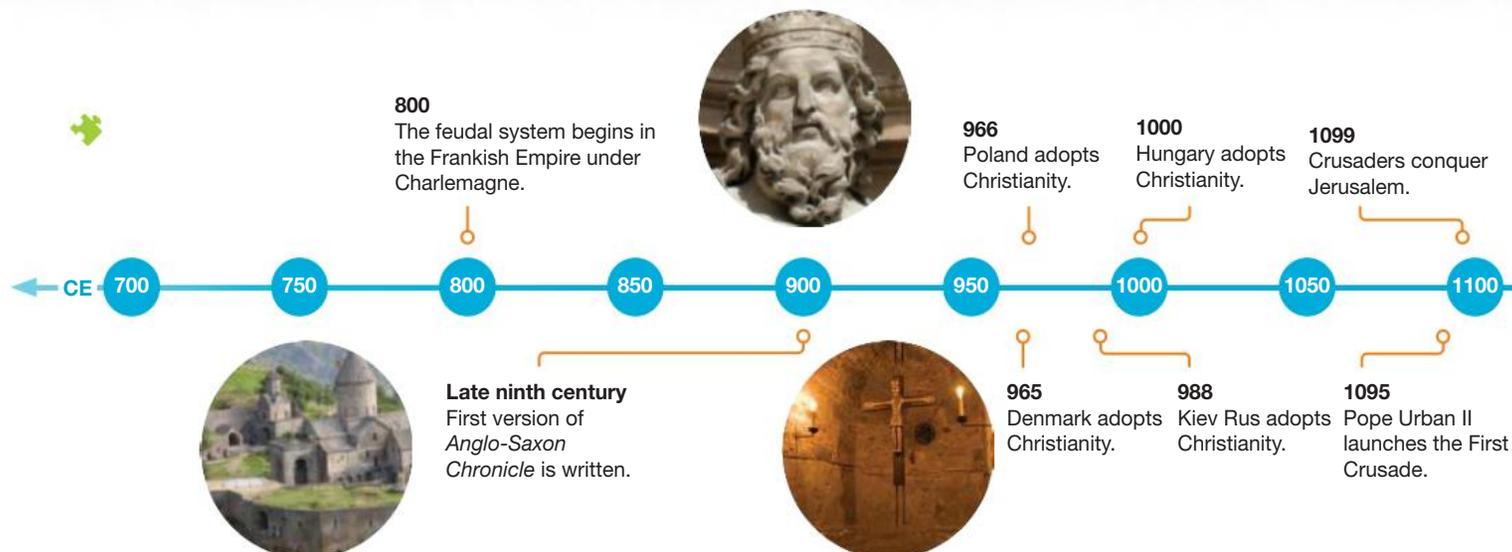
Customisable worksheets for this topic

Digital document

Key terms glossary

Video eLesson

Medieval Europe



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING



1189
Third Crusade begins.



1347
The Black Death begins in Europe.

1391
Geoffrey Chaucer writes *The Canterbury Tales*.

1445
Johannes Gutenberg produces the first European book on a printing press using moveable type.

1492
Christopher Columbus reaches the Americas in a sailing ship. Leonardo da Vinci designs a flying machine.

1147
Second Crusade begins.

1187
Turks reconquer Jerusalem.

1202
Fourth Crusade begins.



1381
The Peasants' Revolt in England.

1453
Constantinople falls to the Turks.

LEARNING INTENTION

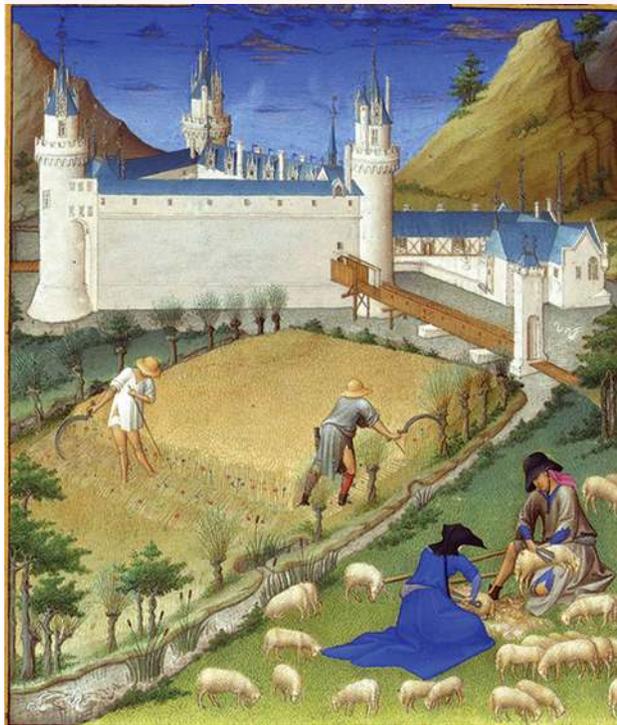
By the end of this lesson you should be able to **identify** the types of evidence that historians use to draw conclusions about medieval Europe.

Tune in

Illuminations such as **SOURCE 1** help us imagine what life was like during the Middle Ages. In the foreground, peasants can be seen engaged in various activities on a farm.

Many illuminations show scenes of village life, with peasants tending their crops and livestock. For the illustrator, such a scene would have been commonplace, because 90 per cent or more of the medieval population were peasants.

SOURCE 1 Peasants working in the fields, from a French calendar illumination by the Limbourg Brothers, c. 1415



1. Brainstorm five conclusions you could draw about French medieval life from SOURCE 1.
2. As a group, decide whether you would consider this a trustworthy or reliable source.

12.2.1 How do we know about medieval Europe?

There are many different types of evidence that provide historians with information. These include artwork, written sources and artefacts, monuments and buildings.

12.2.2 Artwork

Besides illuminations, embroidered tapestries are also valuable to historians. The Bayeux Tapestry (see **SOURCE 2**) is an embroidered cloth showing the Battle of Hastings in 1066 and the events before it. It is very well preserved and is displayed in Bayeux, France. Although its origins are unclear, such wall hangings were used for decoration and to insulate cold castle walls. They were also portable and moved with their owners. These artworks provide historians with much information about the scenes they show and the technologies available to their creators. Other artworks include paintings, mosaics and frescos.



SOURCE 2 A section of the Bayeux Tapestry that shows the preparation of the feast while on campaign fighting for King William I of England



SkillBuilder discussion

Analysing

1. Look at **SOURCE 2**. What details in the tapestry illustrate the daily life and activities of servants during a military campaign?
2. What can we learn about the food, clothing and customs of the time from this section of the tapestry?

12.2.3 Written sources

Many stories and poems from the Middle Ages give us valuable information. One famous example is Geoffrey Chaucer's *The Canterbury Tales*, written around 1391. This book looks at medieval English society. The titles of the tales, like 'The Miller's Tale', 'The Knight's Tale' and 'The Monk's Tale', show the different jobs people had.

Official records also provide information about the Middle Ages. For instance, William the Conqueror (William I) conducted a survey of all property in England in the late 11th century. This record, called *The Domesday Book* (see **SOURCE 3**), details the resources in England at that time, and is very useful for historians.

Did you know?

The term 'Dark Ages' was originally used by the Italian scholar Petrarch in the 1330s. He was describing what he considered to be the poor quality of literature coming from Europe in the period following the fall of Rome.

SOURCE 3 *The Domesday Book* is an amazing eleventh-century public record of who owned what and how much they had. After conquering the English, the new king, William I, ordered a public survey of his new territory, and the record was written up to become *The Domesday Book*.



12.2.4 Artefacts, monuments and buildings

Artefacts, monuments and buildings from the Middle Ages are valuable sources of information. Artefacts include items like coins, armour, weapons, utensils, tools and goblets. Durable metals like silver, gold and bronze are more common than garments or materials like timber and iron, which tend to rust or rot. Historians use written and pictorial records to understand what these materials looked like.

Many buildings from the Middle Ages still exist, such as cottages, churches, monasteries, tithe barns, castles and manor houses. The cottage in **SOURCE 4**, made of **thatch** and stone, is a good example of a fourteenth-century peasant's home, though it would have needed frequent renovations. In contrast, **SOURCE 5**, Dover Castle, was built for much wealthier and more powerful people. Its history dates back to pre-Roman times, but its current form began under King Henry II in the late twelfth century.

Castles like Dover help historians understand their use as military fortresses and homes for the rich. Comparing cottages and castles shows the class differences between peasants and their rulers. Even ruins can provide clues about life in the Middle Ages.

SOURCE 4 These reconstructed cottages date back to the fourteenth century.



SOURCE 5 Dover castle in Kent, England, was built in the eleventh and twelfth centuries.



SkillBuilder discussion

Evaluating

1. Look at **SOURCE 5**. What architectural features of Dover Castle indicate its use as a military fortress?
2. How does the design of Dover Castle reflect the social status and lifestyle of its inhabitants?
3. What can the location and structure of Dover Castle tell us about the historical significance of its site?

12.2.5 First-hand accounts of the Black Death

The Black Death was a devastating event that affected many countries. By using primary and secondary sources, we can learn how this plague impacted people at the time. Monasteries in Europe recorded events in **chronicles**. Writers like Ibn Khaldun in the Middle East and the monk Henry Knighton in England wrote about the plague's effects in their countries. In Italy, Agnolo di Tura detailed how the plague affected the people of Siena (see **SOURCE 7**).

Medieval church parishes kept records of baptisms, marriages and deaths. Although the Black Death caused many deaths, making it hard for priests or monks to keep records up-to-date, some accurate details still survive. It takes effort to piece all these elements together.

The leasing of land to the church for emergency graveyards shows how suddenly and violently the plague struck. The medieval world was shocked by the plague and was not ready to handle it.

SOURCE 6 Boccaccio's *Decameron* was written between 1349 and 1351 and contains descriptions of the effects of the Black Death on the population of the Italian city of Florence. Illustrations were an important part of every medieval book.



SOURCE 7 From Agnolo di Tura's *Description of the Black Death*, 1348

The victims died almost immediately. They would swell beneath the armpits and in the groin and fall over while talking. None could be found to bury the dead for money or friendship. Members of a household brought their dead to a ditch as best they could, without priest, without divine offices. In many places in Siena great pits were dug and piled deep with the multitude of dead. And they died by the hundreds, both day and night, and all were thrown in those ditches and covered with earth. And as soon as those ditches were filled, more were dug.

Contemporary artists

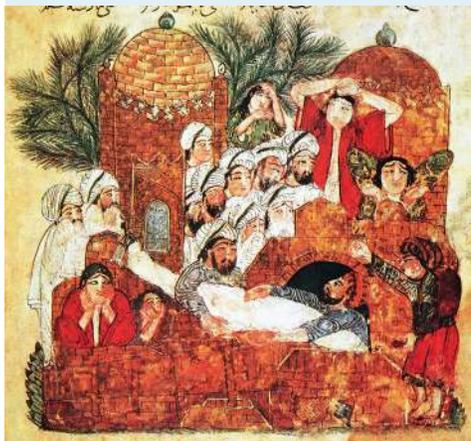
Just as writers were keen to record the events happening around them, artists produced drawings and paintings showing many aspects of the Black Death. As well as illustrating the symptoms of the disease in their artworks, artists were inspired to explore themes of death and destruction. Burials, skeletons and personifications of death featured prominently, such as in **SOURCE 8**.

SkillBuilder discussion

Questioning and researching

1. What details in the manuscript illustrate the burial practices for plague victims during this period?
2. How does the artwork show what people thought about death and disease in thirteenth-century Persia?
3. What does the manuscript tell us about how the plague affected Persian society?

SOURCE 8 The burial of a man who died of plague from a thirteenth-century Persian illuminated manuscript



12.2 SkillBuilder activity COMMUNICATING AND REFLECTING

1. Make a list of types of sources shown in this lesson under the headings 'Artwork', 'Written sources' and 'Artefacts, monuments and buildings'.
2. Write an explanation paragraph about what you can learn from each one, and provide an example.
3. **Share** these in your class and add to a class document that you can display in your history classroom.

12.2 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 3, 6

■ LEVEL 2

5, 7, 8, 11, 12

■ LEVEL 3

4, 9, 10

REMEMBER AND UNDERSTAND

1. Identify the different types of artwork that historians have access to in order to draw conclusions about the medieval era. Select all that apply.
 - A. Illuminations
 - B. Photographs
 - C. Tapestries
 - D. Films
 - E. Buildings
 - F. Paintings
 - G. Frescoes
 - H. Letters
 - I. Mosaics
2. Are the following statements true or false?
 - a. Illuminations were mostly concerned with scenes of aristocracy and court life.
 - b. Medieval church parishes kept no written records.
 - c. The **SOURCE 3** photograph of *The Domesday Book* is a secondary source.
 - d. Embroidered tapestries are not valuable to historians as they were only used to insulate castle walls.

3. Consider **SOURCE 2**.
The Bayeux Tapestry was created to celebrate _____.
The purpose of such a wall hanging was for decoration and _____.
4. **Explain** the importance of written sources from this period to historians.
5. Identify the types of artefact that were most likely to survive from this period.
 - A. Items made of cloth
 - B. Items made of timber
 - C. Items made of silver, gold or bronze
 - D. Items made of iron
6. **Describe** the illustration in **SOURCE 8** and explain the reactions of the subjects.

ANALYSE AND APPLY

7. Refer to **SOURCE 2**. **Identify** the questions you would need to ask to work out what its biases are.
8. **Analyse** how **SOURCES 1, 4** and **5** help us learn about what life in medieval Europe was like.
9. **Explain** what a historian would be likely to learn about the medieval period from *The Canterbury Tales*.
10. **Examine** the reasons why William the Conqueror conducted a public survey of his new kingdom and created a written account of it (*The Domesday Book*).
11. Read **SOURCE 7**. **Explain** what this source reveals about the symptoms of the plague.

EVALUATE AND COMMUNICATE

12. Although Boccaccio's *Decameron* (see **SOURCE 6**) is a work of fiction, it can still provide useful historical information. **Discuss** how works of fiction can help us to find out about the past.

Answers and sample responses for this topic are available online.

LESSON 12.3 The key features of the feudal system

LEARNING INTENTION

By the end of this lesson, you should be able to **describe** the hierarchical structure and way of life of European medieval feudal society.

Tune in

Charlemagne (Charles the Great) was King of the **Franks** and eventually the Holy Roman Emperor, having united Europe under his rule. Through a variety of military campaigns and powerful negotiations, he established peace and order in most of Europe.

1. **Look closely at the statue of Charlemagne in SOURCE 1 and identify the traditional symbols of power that you can see. Discuss what they might represent.**
2. **With the person sitting beside you, decide what personal qualities you think a strong monarch would have needed in this era. Share these with the class and see if you agree.**

SOURCE 1 A statue of Charlemagne that stands in Paris



12.3.1 Order out of chaos

Charlemagne was King of the Franks from 768 to 814 CE. He was a powerful leader who conquered many lands. His empire grew larger than the old Roman Empire and, in 800 CE, the Pope crowned him ruler of the Holy Roman Empire. Charlemagne brought peace and productivity to his chaotic empire by implementing a strong feudal system.

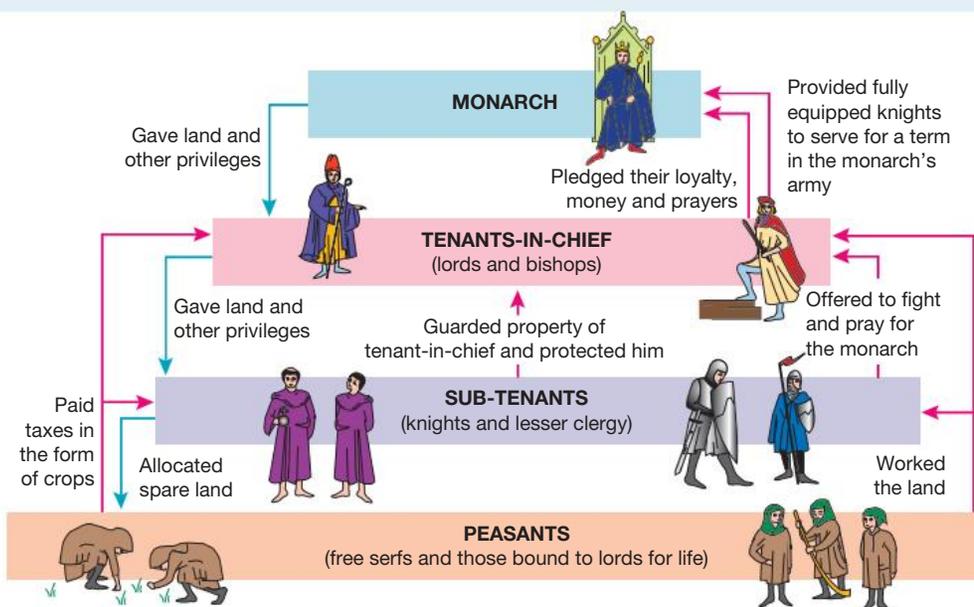
In 800 CE, Charlemagne gave land to churchmen and wealthy families in exchange for their support in running the empire. This system is called **feudalism**. Although based on older practices, Charlemagne's time provides strong evidence of a clear feudal system in Europe. It took hundreds of years for feudalism to spread. Some European countries never adopted it, and some Asian societies, like Japan, developed their own versions of feudalism.

12.3.2 The feudal kingdom

In early medieval Europe, there were few cities or towns. Most communities were small villages. Most villagers were peasants — poor farmers who worked the land. Peasants made up about 90 per cent of the population and generated most of the wealth.

Under feudalism, the monarch (king or queen) owned all the land. The next most powerful were the feudal **lords**, nobles who owned large areas of land. In exchange for land and control over peasants, these nobles (or tenants-in-chief) had to be loyal to the monarch, fight in wars, and give the monarch part of the taxes collected from peasants. Below the nobles were the knights (or sub-tenants). They received land in return for loyalty, fighting for their lord, and providing taxes they took from their peasants.

SOURCE 2 How society in Europe was organised under the feudal system



SkillBuilder discussion

Analysing

1. Study **SOURCE 2**. How does the image show the roles and responsibilities of each class in the feudal system?
2. What visual elements in the image highlight the power relationships between different social classes?
3. How does the feudal hierarchy help us understand the economic and social structure of medieval European society?

The monarch also gave land to the **clergy**. In western European countries such as England, the clergy swore loyalty to the Pope in Rome rather than to their monarch. However, they also supported the feudal system by accepting the monarch and the lord as God's earthly representatives. Well-educated clerical advisers were often assigned to the monarch's service and helped keep social order.

Maintaining the social order

Feudalism helped monarchs control their nobles and lords. If the lords broke their oath, the monarch could take back their lands and remove their power. Everyone had control over those below them, down to the peasants at the bottom.

Towards the end of the Middle Ages, trade-based towns and cities grew. This meant rich merchants could defy or ignore the monarch and the lords, and could even hire their own knights. This led to the decline of feudalism. *The Domesday Book*, ordered by William the Conqueror around 1085, recorded who owned what land and how much tax was owed. This helped him maintain control over the society, but it also now gives us a clear picture of how medieval manors functioned.

12.3 SkillBuilder activity ANALYSING, EVALUATING

Read the **SOURCE 3** extract from *The Domesday Book* closely and complete the following.

- Identify** the tenant-in-chief of this village.
- Identify** how many families of villagers are indicated (each number represents a family, rather than a single person).
- Identify** how much land Hitchen has.
- Determine** what resources this village has.
- Assess** whether or not this was a thriving village.

SOURCE 3 This extract from *The Domesday Book* gives information about a reasonably large village called Hitchen in County Hertfordshire.

Source Taxable units: Taxable value 5 **geld** units.

Value: Value to lord in 1066 £4.

Value to lord in 1086 £6.

Value to lord c. 1070 £1.

Households: 45 villagers. 17 smallholders. 12 slaves. 29 cottagers.

Ploughland: 38 ploughlands (land for). 7 lord's plough teams. 1 lord's plough teams possible.

22 men's plough teams.

Other resources: 2.5 lord's lands. Meadow 4.25 ploughs. Woodland 600 pigs. 4 mills, value 2.66.

1 church.

Lords in 1066: Earl Harold; Hitchin, church of.

Lords in 1086: Hitchin, church of; King William.

Tenant-in-chief in 1086: King William.

Learning pathways

■ LEVEL 1

1, 2, 5

■ LEVEL 2

3, 4, 6, 9

■ LEVEL 3

7, 8, 10

REMEMBER AND UNDERSTAND

- Identify the two features of Charlemagne's rule that led to him being one of the most significant figures in medieval Europe.
 - His empire grew larger than the old Roman Empire.
 - He took land from wealthy families and gave it to the poor.
 - He implemented the feudal system.
 - He gave people the option to convert to Christianity.
- Identify who was the ruler and owner of the land under feudalism.
 - The monarch
 - Tenants-in-chief
 - Sub-tenants
 - Peasants
- Identify** the tenants-in-chief under feudalism.
- Apart from the monarch, **state** who the clergy swore loyalty to.
- Identify how the lords maintained control over the people below them.
 - By punishing them with physical torture
 - By taking back land and removing their source of power
 - By giving them a fine
 - By having a stern word with them

ANALYSE AND APPLY

- Explain** how *The Domesday Book* gave William the Conqueror power.
- Using the information in **SOURCE 1** and **SOURCE 3**, **compare** and **contrast** how the symbols of power are used to show the strength of the monarch or tenant-in-chief, and what those symbols represent.
- Using the information in **SOURCE 2**, explain the organisation of feudal society.
- Identify** who benefited from the feudal system and who did not. **Explain** your choices.

EVALUATE AND COMMUNICATE

- Using the diagram in **SOURCE 2** and your broader knowledge, **propose** three essential elements of a feudal society. These may be physical constructions, social classifications or ways of thinking.

Answers and sample responses for this topic are available online.

LESSON 12.4 Life for people in the feudal system

LEARNING INTENTION

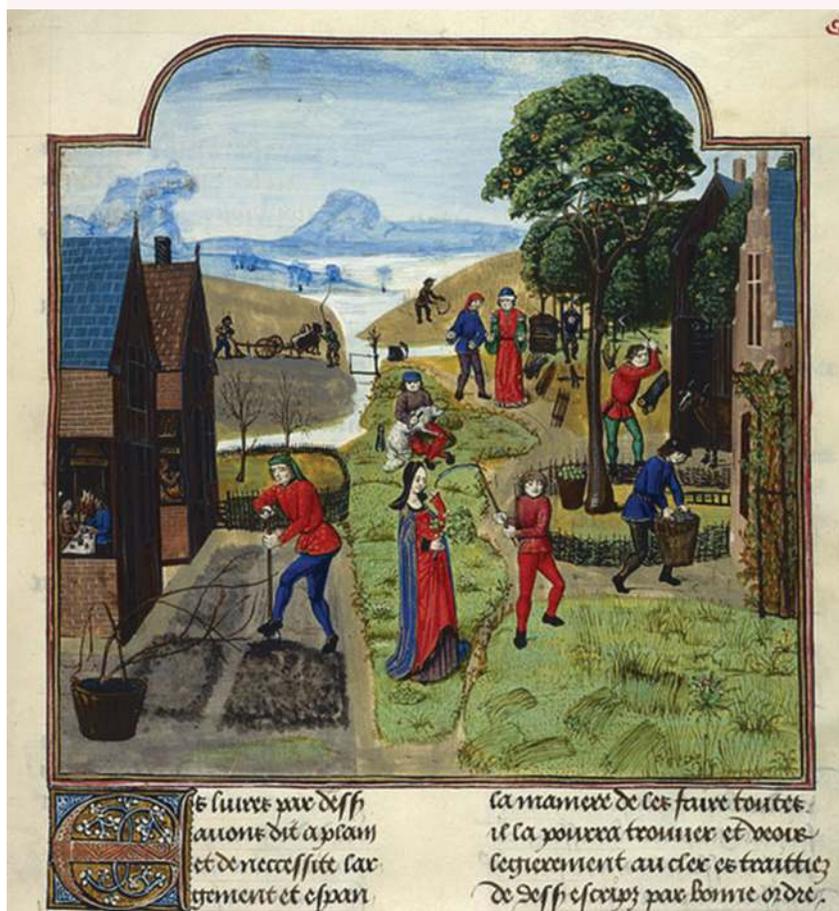
By the end of this lesson you should be able to:

- **distinguish** between the roles of medieval men and women in different social classes
- **explain** how the life of a child in medieval society differs from your own.

Tune in

As can be seen in this **SOURCE 1** image from fifteenth-century France, peasants worked the fields and paid most of their produce to their lords as tithes (a type of tax).

SOURCE 1 An image depicting peasants working in the fields in the fifteenth century



Closely examine the image.

1. **See:** What can you see the people in the illumination doing?
2. **Think:** What does it make you think in terms of what you have already learnt about the feudal system?
3. **Wonder:** Share the questions that it raises for you about life on the manor in medieval times. Keep a list of these to see if they are answered as you work through this lesson.

12.4.1 The people on the manor

Quality of life in the Middle Ages depended on a person's position in the feudal system. Nobles, with their wealth and servants, lived more comfortably than peasants. Knights and barons had privileges, such as owning several manors and living off taxes from peasants. The clergy led simple lives, giving up possessions to serve God. As the educated elite, they enjoyed learning in their monasteries. Although clergy often did farm work like peasants, many monasteries operated like manors and owned villages.

Women

Medieval women, regardless of class, had few rights. Noble women married as early as age 12, with marriages arranged by their families to gain political power or wealth. Society expected them to produce a male heir. Childbirth was dangerous and about one in five women died during childbirth. Noble women managed their husband's household and had some control over servants but could not own property, except as widows.

SkillBuilder discussion

Analysing

1. Look carefully at **SOURCE 2**. What specific tasks are the peasant women performing?
2. How does the image show the daily life and working conditions of peasant women in the Middle Ages?
3. What can we learn about the social and economic roles of peasant women from this image?

SOURCE 2 Much of the farm work was carried out by peasant women.



Peasant women had even fewer rights. Peasant families generally were reluctant to allow their female members to marry as young as the noble women. This was because children were an important source of labour. Peasant women did much the same farm labour as the men. On top of that, they had household duties such as preparing food and weaving clothes, and looking after the children and small livestock.

Men

For most peasant men, life was very hard. They endured a daily grind of farm work: clearing fields, harvesting, repairing buildings, sawing and chopping timber, and paying the tithe to the lord of the manor. Most men were uneducated and remained tied to the drudgery of peasant labour. Still, some boys managed to receive formal education in monasteries. This might provide them with the opportunity to become a parish priest or to work on the manor in a bookkeeping role such as a bailiff or a steward.

Children

Childhood as a time of play or schooling was almost non-existent. Children were regarded as sources of labour on the farm. At first they would help the women with household chores, but eventually were sent out to work on the fields. Peasant children were educated in how to harvest a field, fix a thatched roof or milk a cow.

It appears that in medieval Europe, the period of human growth now called adolescence was ignored. Children were treated as adults from the age of 10 because by then they could participate in the farm work, and usually married when they were about 14 years old.

12.4 SkillBuilder activity **EVALUATING**

SOURCE 1 is a primary source and **SOURCE 3** is a secondary source.

1. As a class, **discuss** the value of each of these sources, as well as their limitations. Be specific about the content of each source.
2. If you were only allowed to use one source to explain this lesson to someone else, **decide** which one you would use. **Explain** your reasons in detail and share with the class.

12.4 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 3, 6

■ LEVEL 2

4, 7, 9

■ LEVEL 3

5, 8, 10

REMEMBER AND UNDERSTAND

1. Identify the type of work peasant men generally did.
 - A. Preparing food
 - B. Farm work
 - C. Being a parish priest
 - D. Weaving clothes
2. Determine if the following statements are true or false.
 - a. It was impossible for peasant men to manage to get an education.
 - b. Children were treated as adults from the age of 12.
3. Why were noble women's marriages arranged for them by their family?
 - A. This was the tradition during the Middle Ages.
 - B. It was to gain political power or wealth for the girl's family.
 - C. It was a mandatory rule enforced by the monarch.
 - D. Arranged marriages were the only form of marriage in the Middle Ages.
4. **Outline** what property rights a noble woman had compared with her husband.
5. **Propose** why it might have been highly valued to have a large family in medieval Europe.

ANALYSE AND APPLY

6. **Explain** which social class most people in medieval Europe belonged to.
7. **Consider SOURCE 1** and **SOURCE 3**.
 - a. **Construct** a list of the work you can see people doing in **SOURCE 1** and **SOURCE 3**.
 - b. From the jobs you listed in Question 7a, **identify** which jobs women and children were able to do.
8. **Determine** who held the most wealth and power on the manor in **SOURCES 1** and **3**. **Identify** the basis of their wealth.

EVALUATE AND COMMUNICATE

9. **Examine** the picture of life on a manor in **SOURCE 3**.
 - a. **Explain** the roles of the reeve, steward and bailiff.
 - b. **Construct** a diagram that shows the bailiff, steward and reeve in order of importance.
 - c. **Explain** whether women would have been allowed to do the jobs of steward, bailiff and reeve in medieval times. **Justify** your answer.

10. Using the information gained from **SOURCE 1** and **SOURCE 3** from this lesson, as well as any other knowledge you have, **construct** a paragraph about life on the manor, **describing** work, living conditions and farming practices in medieval Europe.

Answers and sample responses for this topic are available online.

LESSON 12.5 Medieval castles

LEARNING INTENTION

By the end of this lesson you should be able to describe the features of castles and how they protected society

Tune in

Castles were not just homes to those at the very top of feudal society, but fortresses designed to protect those inside the castle walls.

Study **SOURCE 1**.

1. Create a list of all the features you can see that are protecting the castle.
2. Discuss how these features protect the castle.
3. Predict why fortresses became outdated.

SOURCE 1 Ruin of a medieval Scottish castle fort



12.5.1 Building a castle

During medieval times, castles were built to protect the monarch's or lord's land. They had features such as high walls that made it hard for enemies to invade. If conquered, castles could be used by invaders to control the land. Castle walls were so effective that they were even built around some towns and cities.

The first castles appeared in the 11th century, usually made from timber and built on a high mound called a **motte**, surrounded by a ditch. If near a river, the ditch could be filled with water to create a **moat**. The innermost tower was called the **keep**, protected by **palisades** and walls called baileys. By the end of the 11th century, timber was replaced with stone or brick.

The easiest place to build a castle was on flat ground, but they were often built on hills or cliffs for better defense and control over the surrounding area. A high position made it easier to spot and defend against attackers. Castles on islands in rivers or lakes had advantages too. For example, castles built by rivers could force merchants transporting goods along the river to pay them taxes. Building near water also ensured a water supply during sieges.

12.5.2 Attacking a castle

Attacking a castle was a formidable challenge. As castle designs evolved, they incorporated more defensive features. **Concentric curtain walls**, like those at Marienburg Castle in Poland (which had five), forced attackers to breach multiple layers. Drawbridges could be raised to block access, and defenders

launched arrows, rocks, and boiling oil from the walls. The oil was tipped through ‘murder holes’ in the roof of the gatehouse surrounding the main entrance. Attackers used siege engines like battering rams and siege towers. Sieges often lasted months, with defenders relying on stored food and protected water supplies from wells in the inner courtyard.

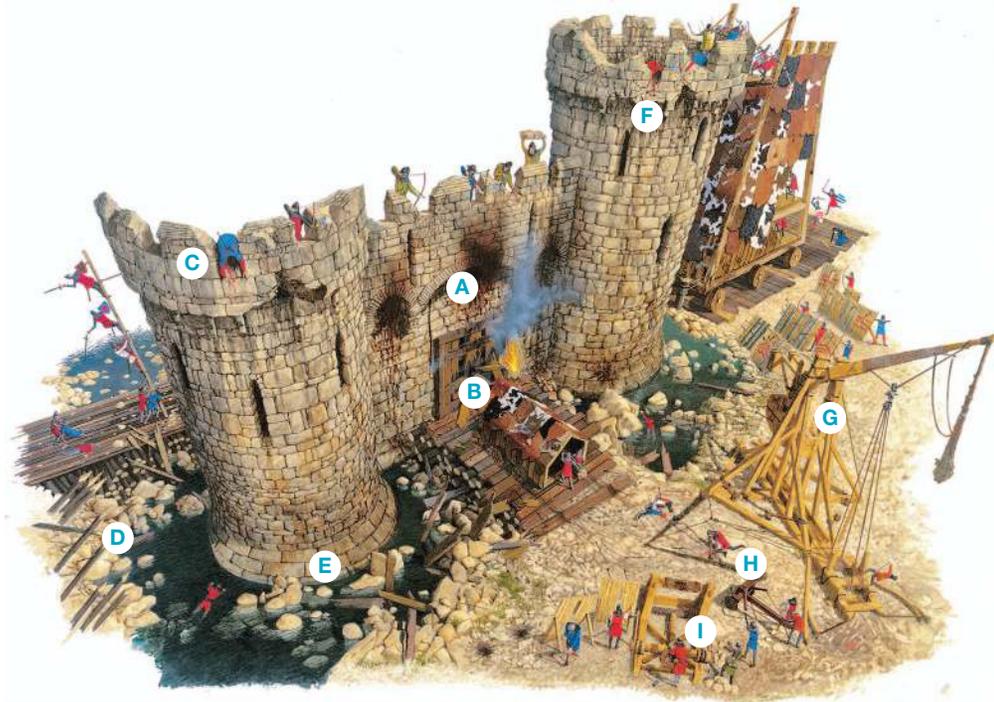


SOURCE 2 A castle under siege

SkillBuilder discussion

Questioning and researching

1. Study **SOURCE 2**. What defensive features of the castle are visible in the image, and how are they being used to repel the attackers?
2. What methods and equipment are the attackers using to try to breach the castle's defenses?
3. How do the people inside the castle appear to be responding to the siege?



Did you know?

Crenellations are the battlements on the top of castle walls or towers. Primarily built for defensive purposes, they allow for cover while still giving the space to return fire or pour boiling oil on the enemy. A ‘licence to crenellate’ was supposedly a grant that gave official permission for a building to be fortified and was used by the monarch and barons who could grant them as a symbol of status and power.

- A** The gatehouse was heavily defended. If attackers got in, defenders could shower them with rocks, red-hot sand or boiling water through a hole in the ceiling (called a murder hole).
- B** A battering ram made of a huge, often reinforced timber beam would be driven against a castle gate or lower wall to try to break through.
- C** Battlements lined the top of castle walls.
- D** A castle was often surrounded by a ditch, sometimes filled with sharpened stakes (palisade) or water.
- E** Sometimes castle walls sloped outwards at the base. This added strength to the walls and reduced the effectiveness of battering rams.
- F** Missiles could be dropped on attackers through holes in the floor of the battlements known as machicolations.
- G** The trebuchet, introduced to Europe from the Arab world, was a type of counterweighted catapult. It was used to hurl huge rocks weighing up to 90 kg against castle walls, and to toss rotting animal bodies over the walls.
- H** The ballista was a giant crossbow that fired flaming bolts over castle walls.
- I** A mangonel was a type of catapult used to hurl smaller objects (e.g. heads, smaller rocks or piles of dung) over castle walls.

12.5.3 A lord’s home is his castle

A castle was a fortress and a home. It was usually owned by a lord or the Church. It had troop quarters, stables and an armoury. If owned by a lord, it also had comfortable facilities for his family.

By the end of the Middle Ages, castles were less effective and desirable. The feudal system, which encouraged lords to show strength with a castle, was fading. Cannons had developed, making castle walls less protective against armies.

12.5 SkillBuilder activity

COMMUNICATING AND REFLECTING

1. **Recreate** what Corfe Castle (**SOURCE 3**) may have looked like. Use the ruins in the photograph to reconstruct it visually. Include the keep, the palisade, the motte and the bailey, and label them.
2. Use the internet to **investigate** Corfe Castle in Dorset, England.

Find photographs with further detail and add to your diagram.

You might also find an artist's representation of what the original castle looked like to check against your diagram. How close were you?

SOURCE 3 The ruins of Corfe Castle, in Dorset, England. The square tower is a Norman keep. The destruction was the result of cannon fire during the English Civil War in the mid-seventeenth century.



12.5 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 5, 9

■ LEVEL 2

3, 4, 7

■ LEVEL 3

6, 8, 10

REMEMBER AND UNDERSTAND

1. The first castles appeared in the _____ century. The innermost tower was called a _____. The bailey was a _____.
2. Early castles were built from:
 - A. timber
 - B. bricks
 - C. stones
 - D. concrete.
3. **Identify** two reasons why castles in medieval Europe were often built on a steep hill.
4. **Explain** what a murder hole was used for.
5. Identify two reasons why castles were built.
 - A. To be a fortress for military use
 - B. To be used as a church
 - C. To be used as a home
 - D. To be used as a school
 - E. To provide employment
 - F. To be used as a palace

ANALYSE AND APPLY

6. **Determine** how the castle was a symbol of the feudal system.
7. **Examine SOURCE 2**.
 - a. **Explain** which features of the castle and its defenders would be most effective in holding back the attack.
 - b. **Explain** which methods of attack appear to be most effective. **Justify** your answers.
8. **Explain** how likely it is that the attackers in **SOURCE 2** will succeed in breaking into the castle. Provide two reasons to **justify** your response.
9. **Explain** the common methods used to attack and defend castles.

EVALUATE AND COMMUNICATE

10. **Deduce** what are the best places to build a castle and **explain** why.

Answers and sample responses for this topic are available online.

LESSON 12.6 Warfare in the Middle Ages

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the role of the knight in medieval warfare, as well as identify the weapons and the strategies used in battle.

Tune in

One of the most iconic images of the Middle Ages is that of the mounted warrior called the knight.

SOURCE 1 depicts Norman knights on horseback attacking their English enemies at the Battle of Hastings in 1066.

1. **Describe** what is happening in **SOURCE 1**.
2. **Explain** how this source would help historians find out about the weapons and armour of medieval knights of the eleventh century.
3. **Discuss** why you think the knight is an iconic image of medieval times, even today.

SOURCE 1 A scene from the Bayeux Tapestry, dating from the late eleventh century



12.6.1 The warrior on horseback

Knights as we know them appeared in the Middle Ages. Two key developments made it possible for soldiers to fight on horseback: the **stirrup** and a heavier breed of horse that could carry a man in full armour. These emerged in the Early Middle Ages. The Battle of Hastings in 1066, between Norman knights and English infantry, is one of the earliest battles involving knights on horseback.

Knights at Hastings fought for their lord, William, **Duke of Normandy**. This feudal service to a lord or monarch was a key part of knighthood. Knights were usually wealthy because it was expensive to breed warhorses and own good armour. They were also powerful landowners.

12.6.2 The knight in battle

As **SOURCE 1** shows, a heavily armed warrior on horseback was meant to terrorise and destroy foot soldiers. The decapitated body at the bottom of the panel demonstrates the effectiveness of a charging knight.

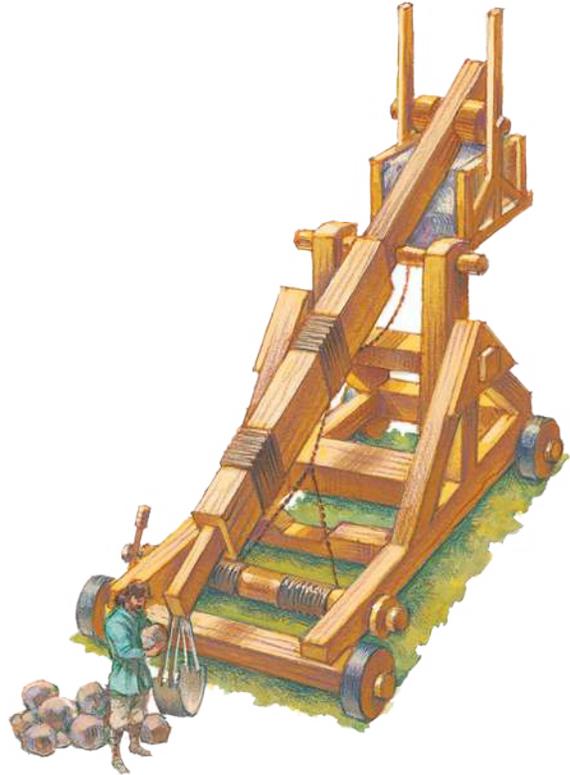
The knight used an arsenal of heavy iron weapons. Swords, **maces** and battle axes were common. However, the **lance** appears to have been the favoured weapon: it helped to put distance between the knight and the infantry soldier he was fighting. As a last resort, the knight's wooden shield could be used as a weapon — swiping at someone with its rim could cause severe wounds.

The armour was both heavy and awkward. The coats of mail worn by the fighters in **SOURCE 5** could weigh more than 15 kilograms. It was no easy task to wear such a cumbersome outfit on horseback and fight furiously in battle.

12.6.3 Medieval warfare

Medieval warfare was vastly different from modern warfare. Battles were fought with swords, axes, maces and arrows. The invention of gunpowder in the 14th century introduced guns and cannons, though early firearms were unreliable. Archers with longbows and crossbows remained crucial until gun technology improved by the late 15th century.

SOURCE 2 The trebuchet was a kind of giant slingshot designed for hurling rocks at enemy armies and fortresses. Sometimes other missiles were used, including dead animals and slain enemies, with the twin aims of demoralising the enemy and spreading disease among the besieged population.



SkillBuilder discussion

Analysing

1. Study **SOURCE 2**. What was the primary purpose of the trebuchet in medieval warfare?
2. Besides rocks, what other types of missiles were used with the trebuchet?
3. How did using dead animals and slain enemies as missiles affect the besieged population?

Medieval battles were chaotic and brutal, with hand-to-hand combat and tightly grouped formations. The noise of battle was intense up close but quieter from a distance compared to modern **artillery**. Knights on horseback charged to disrupt infantry formations, leading to horrific bloodshed. Battles were short but deadly, leaving fields strewn with bodies.

There were no war cemeteries or pensions for soldiers. Disabled veterans often had to beg to survive, highlighting the harsh realities of medieval warfare.

SOURCE 3 From a chronicle describing the Battle of Bannockburn in 1314, when the Scottish rebel leader Robert the Bruce defeated the English, who sought to control Scotland. Robert became King Robert I of Scotland.

The two hosts (English and Scottish armies) came together, and the great steeds of the (English) knights dashed into the Scottish **pikes** as into a thick wood; there arose a great and horrible crash from rending [splitting] lances and dying horses, and they stood locked together.

SOURCE 4 From *The History of the Art of War in the Middle Ages* by C. Oman, published in 1924. The battle described here is between Swiss and German infantry.

The two bristling lines of pikes crossed, and the leading files were thrust upon each other's weapons by the irresistible pressure from behind. Often the whole front rank of each **phalanx** went down in the first onset, but their comrades stepped forward over their bodies to continue the fight.

12.6 SkillBuilder activity ANALYSING

Refer to **SOURCE 5** and your broader knowledge to answer the questions.

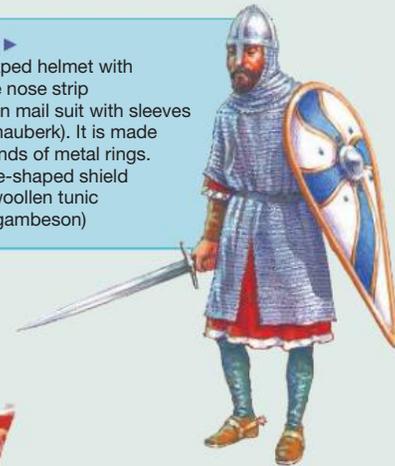
SOURCE 5 The development of the knight's armour: change and continuity

Late 1100s ▶

- Helmet is rounder with wider nose band
- Loose-fitting surcoat worn over chain mail armour to protect it from sun's heat
- Coat of arms identifies the knight
- Hauberk now covers neck and is attached to helmet with leather strips
- Hauberk now includes chain mail mittens. It is getting shorter.
- Shield is not as big and is more triangular
- Chain mail leggings now cover feet

Early 1100s ▶

- Cone-shaped helmet with protective nose strip
- Long chain mail suit with sleeves (called a hauberk). It is made of thousands of metal rings.
- Large, kite-shaped shield
- Padded woollen tunic (called a gambeson)



1400s ▶

- Whole suit of armour weighs about 25 kilograms, but is more flexible than chain mail armour
- Lighter helmets, called barbutes
- Plate armour (made from hammered iron) covers whole body. Joined with metal rivets and leather strips.
- No need for shield
- Iron shoes



◀ 1300s

- Bascinet helmets worn by late 1300s. Visor can be lifted up.
- Pieces of hammered iron plate are added for protection. The combined weight of chain mail and plate armour is now so great that a knight cannot get up on his own if he falls over.
- Shield is smaller and curved for added protection
- Iron gloves (called gauntlets) protect the hands.
- Hauberk is even shorter
- Padded stockings with iron braces are worn



1. **Describe** how the knight's weapons and armour changed between the early 1100s and the 1400s. **List** at least four things that changed (this might include changes in function, appearance or shape).
2. **Explain** why the shield disappeared as armour in medieval Europe by the 1400s.
3. **Use** the images in the source to **clarify** why knights were always from wealthy families.

Learning pathways

■ LEVEL 1

1, 2, 5, 8

■ LEVEL 2

3, 4, 7

■ LEVEL 3

6, 9, 10

REMEMBER AND UNDERSTAND

- Identify the purpose of the mounted warrior.
 - To terrorise and destroy foot soldiers and break up their formations
 - To travel a greater distance
 - To lead soldiers into battle
 - To give soldiers directions during a battle
- Identify the reasons why guns were not as popular as longbows and crossbows during the Middle Ages.
 - They were very slow to load and inaccurate.
 - People did not know how to use guns.
 - They were liable to blow up.
 - They were ineffective at causing damage to the target.
- Recall** three weapons used by fighters in a medieval battle.
- Identify** one way a medieval battle differed from a modern-day battle.
- Closely **examine** the trebuchet in **SOURCE 2** and complete the following passage.
A trebuchet was a giant _____ that medieval armies used in battle. They could sling _____ to cause damage, or hurl the _____ of dead animals or slain enemies to _____ and spread _____ among the besieged population.

ANALYSE AND APPLY

- Explain** why you think that the knight is often seen as a symbol of the Middle Ages.
- Clarify** why weapons and armour changed over time. Think of things like protection and comfort.
- Closely **examine SOURCE 1**. **Name** the weapons that were used in this battle.
- Examine SOURCES 1, 3 and 4**.
 - What can you tell from each of these sources about the effectiveness of pikes in battles?
 - What can you tell from each of these sources about the risk to horses in battle?
 - What can you tell from each of these sources about why tight formations were used in medieval battles?
 - What can you tell from each of these sources about why there were high casualties in the front ranks?

EVALUATE AND COMMUNICATE

- Using what you have learned about knights in this lesson, **construct** a short paragraph exploring why mounted soldiers (knights) became less and less useful in battles as warfare technologies changed. In preparing your answer, **recall** the types of weapons used in medieval warfare and how they changed, as well as the formations that were used.

Answers and sample responses for this topic are available online.

LESSON 12.7 The growth of towns

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why towns began to grow in Europe from the eleventh century
- suggest reasons for why people left the feudal manor and moved to towns.

Tune in

During the Middle Ages, Europe became more peaceful and regular trade routes were established. Towns sprang up along the way and a new social group, the merchants, developed. People left farms towards the towns where they could learn new skills.

Read through **SOURCE 1**, which imagines what life in a medieval town might be like.

SOURCE 1 A young boy's experience on entering the marketplace in the English town of Shrewsbury in 1241. This extract is from *Falls the Shadow*, a novel by Sharon Penman, Penguin, 1989, p. 132.

Church bells pealed out the hour . . . Men wandered the streets shouting 'hot meat pies' and 'good ale' . . . itinerant [wandering] pedlars hawked [tried to sell] their goods, offering nails, ribbons, potions to restore health . . . People gathered in front of the cramped, unshuttered shops, arguing prices at the tops of their voices. Heavy carts creaked down the streets . . . Dogs darted underfoot, and pigs [shuffled] about in the debris dumped in the centre gutter.

1. Describe the features of medieval towns that would have made them dirty, noisy and unhealthy. Start with the ideas mentioned in the extract.
2. Imagine that you were a young peasant coming from the countryside and entering this town for the first time. Role play a conversation that you might have had at the end of your first day, discussing new sights, sounds or smells.

12.7.1 The growth of towns

By the eleventh century, Europe was mostly peaceful. People felt safe to live beyond the security of the manor. Soon, towns sprang up along trade routes, creating a new **middle class** of merchants.

Personal loyalty to a lord in exchange for a **fief** was a basic principle of feudalism. As raids stopped and food increased, money began to replace personal services. This caused the feudal system to weaken.

People moved from manors to towns, many near castles. They learned skills like spinning, weaving, baking, leather work, music, acting, ale brewing, armour construction, ropemaking, butchery, banking, cloth dying, and stonemasonry.

As towns grew, large walls were built around them. Near these walls were the cramped homes of the poor, mostly wooden and many storeys high. Most houses had a flammable paint of pitch and linseed oil. Pitch was a black, tarry substance used to seal cracks in buildings and boats. The rich lived in the town centre.

The town's lanes were crooked and narrow. They had no footpaths and were lit only by lanterns and candles. They were smelly, rat-infested rubbish dumps, filled with food scraps, bones and sewage. Open drains stank from cloth dyes and animal blood. Townspeople walked through this muck to reach the marketplace full of traders, musicians, actors, jugglers, pickpockets and beggars.

12.7.2 Rise of the merchant class

Adventurous European merchants travelled to Asia, northern Africa and the Middle East with goods like iron, timber and copper. They returned with silks, furs, spices, gold and precious stones. They visited trade fairs in Europe, where goods and ideas were exchanged. It is thought that the windmill came from Iran, and soap from China.

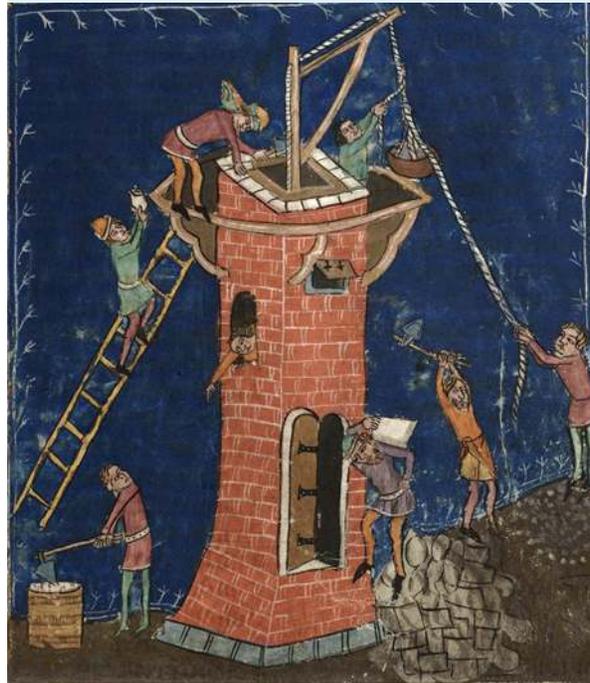
Long-distance trading was risky due to robbers and sea pirates. Merchants often formed partnerships to protect themselves and their profits. This led to companies, which created new jobs. By the late Middle Ages, the merchant class was very powerful.

SkillBuilder discussion

Analysing

1. Look at **SOURCE 2**. What trade is depicted in the medieval illustration?
2. Why were stonemasons considered highly respected craftspeople in medieval society?
3. How did the specialisation of trades contribute to the economic and social changes in medieval towns?

SOURCE 2 Medieval illustration of stonemasons, who were highly respected craftspeople



Growth of apprenticeships

The demand for skilled workers was growing. Apprenticeships were set up to train young people in particular trades. Most were seven-year agreements, and were strictly controlled by guilds.

Guilds

Each skilled craft was controlled by its **guild**. These associations protected interests, settled disputes and set wages and prices. They were like modern trade unions but included employers.

Merchants also had guilds. The most powerful merchant association was the Hanseatic League, which controlled many trading ports around the Baltic Sea and outposts as far as Russia, Italy and England. The Hanseatic League was so powerful in the fourteenth and fifteenth centuries that it minted its money and wrote its laws. In the fourteenth century, it even waged war against the King of Denmark.

SkillBuilder discussion

Questioning and researching

1. Study **SOURCE 3**. How did the design of the homes show the social and economic status of their residents?
2. What does the living arrangement tell us about the role of family and apprentices in medieval businesses?
3. How did the ground-floor shops affect the daily lives and interactions of the people in medieval towns?

SOURCE 3 As shown in this medieval painting, businesspeople usually sold their goods from the ground floor of their home. Family, servants and apprentices lived on the upper floors.



12.7 SkillBuilder activity QUESTIONING AND RESEARCHING

The growth of towns changed the power structures in medieval society and led to significant changes.

As the feudal system weakened, the populations of medieval towns grew. People drifted away from the land and headed for the towns, which became more popular. People began to specialise in trades and would showcase their skills and sell their wares at weekly markets, held in the centre of the town. Merchants began to travel long distances to trade. This created further wealth and a new middle class began to rise.

1. **Choose** a medieval trade that you are not familiar with and **research** whether it is still around today. It may be that it is now known by another name, or it might be obsolete.

Some of these might include:

- chandler
 - wheelwright
 - fletcher
 - scrivener
 - armourer.
2. Use reliable online sources for your research.
 3. After you have conducted your research, **present** your trade to the class, highlighting whether it is still practised today or not.
 4. **a.** Finally, **brainstorm** current trades or occupations that you think might be obsolete in 20–50 years.
b. **Explain** why you think these jobs might disappear.

12.7 Exercise

learnon

Learning pathways

■ LEVEL 1

3, 4, 5, 9

■ LEVEL 2

1, 2, 6,

■ LEVEL 3

7, 8, 10

REMEMBER AND UNDERSTAND

1. **Explain** the basic principle of feudalism.
2. **Identify** the initial change that meant that food stock increased and money could be exchanged.
3. **a.** The _____ usually lived in _____, wooden homes next to the large _____ that were built around _____.
b. The homes of the wealthy were in the town centre. True or false?
4. Identify three destinations where the more adventurous European merchants travelled.
A. Asia
B. Middle East
C. Antarctica
D. Southern Africa
E. Northern Africa
5. What is a guild?
A. An association of people engaged in a particular trade or craft for the mutual benefit of its members
B. An association of people engaged in a particular trade or craft for the benefit of its lord or king
C. An association of lords or kings engaged in a particular trade or craft for the mutual benefit of its members
D. An association of lords or kings engaged in a particular trade or craft for the benefit of its people

ANALYSE AND APPLY

6. **Describe** the medieval trades you can see in **SOURCES 2** and **3**.
7. **Summarise** the major role of guilds in medieval Europe.
8. **Explain** the factors that led to the decline of feudalism.

EVALUATE AND COMMUNICATE

9. Imagine you are a young town dweller in the Middle Ages seeking a trade. **Select** a trade you would like to be apprenticed in. **Justify** your choice.
10. **Explain** what the growth of trade and skilled crafts had to do with the growth of towns in medieval Europe.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the types of crimes committed in the medieval period and the different punishments for different groups of people
- **explain** how these punishments changed over time.

Tune in

This device was found in most villages and towns in medieval times. It was intended as a form of corporal punishment.

Discuss the following questions and suggest answers.

1. **What is the purpose of punishment? Why do we have it?**
2. **Is public humiliation worse than other types of punishment? Explain your answer.**
3. **What do you think is the difference between corporal and capital punishment?**

SOURCE 1 A pillory in a village square



12.8.1 Community justice

In medieval Europe, most people lived in villages on feudal manors or in crowded towns behind city walls. There was no police force, so people had to protect themselves. The community was hierarchical, with lords or their reeves dispensing justice. Later, villages had volunteer constables and watchmen.

Crimes were dealt with in several ways:

- *Hue and cry*: When someone saw a crime, they called out an alarm. Neighbours had to catch the criminal. If the criminal resisted, they could be killed.
- *Tithing arrest*: All males over 12 years old were responsible for ensuring everyone followed the law. Households were organised in groups of ten (tithing). If someone broke the law, the tithing had to arrest them and take them to court. If they didn't, they were fined.
- *Posse comitatus*: If a criminal was on the run, the local sheriff could call on men to help catch them.

12.8.2 Public humiliation

An accusation of disturbing the peace meant the crime affected the community's security. In medieval times, this included public drunkenness, violent arguing, brawling, and swearing. Punishments aimed to deter others by publicly humiliating the offenders.

Those accused were often put in stocks or the pillory. Stocks restrained the feet or hands, while the pillory was more severe, locking the head and hands (or feet) in a wooden restraint. Offenders were left all day in the town square. Villagers would jeer and throw rotting vegetables at them.

SkillBuilder discussion

Questioning and researching

1. Look at **SOURCE 2**. What does the scold's bridle tell us about the treatment of women and society's attitudes towards them in medieval times?
2. How might wearing a scold's bridle affect the physical and emotional wellbeing of the person subjected to it?
3. What behaviours or actions do you think were punished by making someone wear a scold's bridle?

SOURCE 2 A woman wearing a scold's bridle



Women accused of gossiping faced harsh punishments. These included:

- the scold's bridle: a heavy iron muzzle with a bit that silenced the woman, causing pain and humiliation as she was paraded around town
- the ducking stool: a stool attached to a wooden arm over water, where the accused was repeatedly dunked, often for gossiping, scolding, or perceived witchcraft.

Theft was common, with punishments ranging from fines to mutilation (losing ears, hands, or being blinded) and public flogging.

When the Normans took power in England in the 11th century, they mostly kept the Anglo-Saxon system but introduced new forest laws, banning people from common lands now owned by the monarch. Permits were required for hunting or taking timber, generating revenue for the Normans. They severely punished poachers.

The Normans also introduced the murdrum fine, designed to deter Anglo-Saxons from secretly killing Normans. Where a Norman was killed, the whole village had to pay a fine (and the culprit was executed, if found).

12.8.3 Trials

Trials by jury were held in the manorial court. All male villagers had to attend several times a year or they would be fined. The lord's steward or reeve oversaw the court, and the jury was made up of 12 village men. The jury decided if the accused was guilty and what the punishment would be.

Trial by ordeal was used for serious crimes across Europe. Different ordeals were used to determine guilt or innocence. In the ordeal by fire, the accused took a hot iron bar from a fire and walked with it. Their hands were bandaged, and after three days, the wounds were checked. If they started to heal, the person was innocent; if not, they were guilty. In another form, trial by hot water, the accused had to retrieve an iron bar or ring from boiling water.

In trial by water, the accused was tied up and thrown into a lake or river. If they sank, they were innocent; if they floated, they were guilty. In 1215, the Pope banned trials by ordeal, and they stopped in Europe over the next few years.

Another form of trial, available only to the nobility, was trial by combat. It involved a fight to the death to establish innocence. However, it was not strength that people believed won the battle but the support of God; hence, if the accused won the battle, then they were considered innocent because God had spared them. This practice was replaced at the end of the Middle Ages by trial by jury.

SOURCE 3 Trial by hot water



12.8.4 Crimes against the Church

Along with the monarchy, the Church was very powerful in medieval Europe. Crimes against the Church were punished severely to control the population and maintain Christian beliefs. **Blasphemy**, refusing to acknowledge God or the Church, was a serious sin. Punishments included cutting out the tongue, stoning, or hanging. **Heresy**, holding different religious beliefs, was also punished harshly. **Heretics** were often burned at the stake.

Witchcraft was seen as heresy because witches were believed to be the devil's companions. Witches were blamed for diseases and natural disasters. The trial by water was used to test if someone was a witch; if found guilty, they were burned at the stake. Many accused witches were women, especially older herbalists or midwives.

The Church offered **sanctuary** to those accused of serious crimes. If they reached a church and confessed, they could stay for 40 days without arrest. After that, they had to choose between leaving the country or being hanged.

12.8.5 Treason

The most serious crime was treason, which included plotting against the monarch, conspiring with foreigners, and leading a rebellion. To maintain power, the monarch had to remove their enemies. Nobles who betrayed the monarch were thrown into dungeons to await trial. If found guilty, they faced terrible punishments like being burned at the stake, flayed alive, or hanged, drawn and quartered.

Hanging, drawing and quartering meant the person was hanged until nearly dead, then pulled apart by horses, and finally cut into quarters, with their body parts thrown into a fire. The executioner tried to keep them alive and in pain until the end. These brutal executions were meant to warn others. The public was encouraged to watch, treating them as a form of entertainment (see **SOURCE 4**).

SkillBuilder discussion

Evaluating

1. SOURCE 4 is an illustration of a public execution. What emotions and reactions can you observe in the audience watching the execution?
2. How does the image show the method of execution and the role of the executioner?
3. What can the setting and surroundings in the image tell us about the importance of public executions in medieval society?



SOURCE 4 A public execution complete with audience



12.8 SkillBuilder activity EVALUATING

1. Review this lesson for the different forms of punishment dealt out in the medieval period. **List** them in your exercise book.
2. For each of them, write either 'obsolete', which means that it is completely out-of-date, or 'connections to today'. For those for which you can see connections to today, write a few sentences and **explain** how they relate to today's justice system.
3. Share your list with the class and see if you have any common elements. As a class, **discuss** whether you believe that the modern Australian justice system has any common elements developed from medieval European justice.

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 8

■ LEVEL 3

6, 7, 9, 10

REMEMBER AND UNDERSTAND

- State what was 'hue and cry'.
 - When a criminal is unfairly attacked and complains to the constable about their treatment
 - When observers to a crime call out an alarm and everyone nearby has to try to catch the law-breaker
 - When neighbours complain about each other and must settle it in court
 - When the offender is identified by the victim in front of everyone
- Recall** a common punishment for public drunkenness.
- Are the following statements true or false?
 - The murdrum fine was designed to protect the whole village.
 - Crimes against the Church weren't considered serious and only carried minor punishments.
 - Medieval punishments generally avoided humiliating the offender.
 - Men in tithing groups were required to arrest anyone in their group who broke the law.
- Complete the following sentence:
 Trial by _____ was held in the manorial court and involved _____ men deciding judgement on the accused. Trial by _____ involved physical challenges from which _____ would protect the innocent. Trial by _____ involved a physical fight where the innocent person would be spared by _____.
- Recall** the two crimes that were believed to be against God and the Church.

ANALYSE AND APPLY

- List** the common medieval punishments that you have read about in this lesson in two columns: corporal punishment and capital punishment.
 - Thinking back to your discussion about the purpose of punishment, **discuss** some conclusions about the purpose of medieval punishment.
- Identify** any difference in the justice dealt to a peasant compared to the nobility.
- SOURCE 4** shows another form of capital punishment not mentioned in the text of this lesson. **State** what it is.
 - Using **SOURCE 4**, and your broader understanding from the lesson, **explain** why the public was encouraged to view executions.

EVALUATE AND COMMUNICATE

- Consider** how medieval rulers managed to overcome their lack of a police force. In your answer, **explain** how they managed to keep an orderly society without police.
- Evaluate** how the power structures in medieval society were reflected in the punishments for crimes.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to:

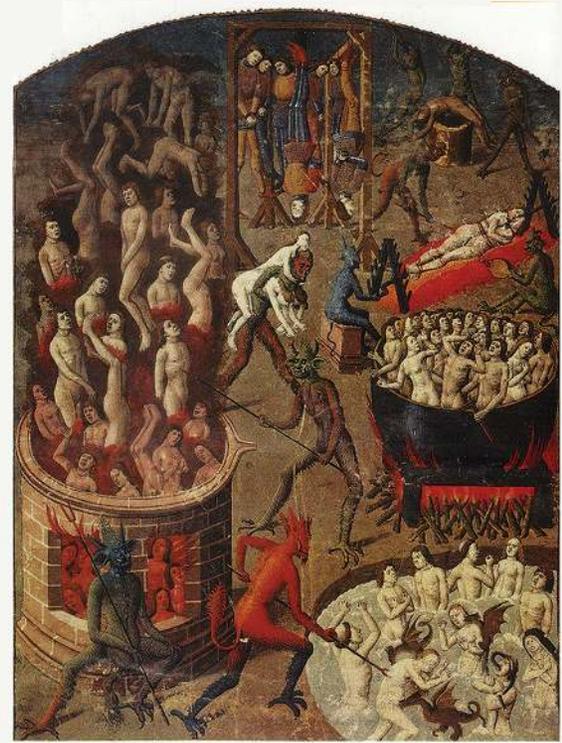
- **explain** Church's power in terms of its control of wealth, land and labour
- **identify** its hierarchical structure with the Pope at the top.

Tune in

Imagine viewing this painting in a dimly lit medieval church with the smoky scent of incense in the air. Paintings such as this were common in churches in the medieval times. However, they were not there only as art, but rather to persuade the congregation about a particular viewpoint. Let's look more closely at this painting to work out what that viewpoint was.

1. **Examine the painting in SOURCE 1 very closely and discuss what is happening in each part of the scene.**
2. **Propose what effect a painting like this was intended to have on people's behaviour.**
3. **Share your ideas on how images like this would increase the power of the Church in medieval times.**

SOURCE 1 A medieval painting depicting what happens to people when they go to hell

**12.9.1 The authority of the Church and the Pope**

Christianity stemmed from the Jewish religion, Judaism, in the first century CE. It spread throughout Europe after becoming the official religion of the Roman Empire. Following the fall of Rome, it became entrenched as the principal religion across Europe. For many reasons, cultures turned away from their traditional belief systems and adopted Christianity.

The Roman Catholic Church was the main institution in western Europe. Its rituals were similar everywhere, and it used Latin, though only the clergy spoke it. Everyone had to follow Church law and attend **Mass**. Priests often gave **sermons** in the local language to remind people of their Christian duties.

SkillBuilder discussion

Analysing

1. Look closely at **SOURCE 2**. What architectural features of Canterbury Cathedral identify it as Gothic?
2. How does the design and decoration of Canterbury Cathedral reflect the religious and cultural values of the medieval period?
3. What might the construction and maintenance of such a grand cathedral tell us about the society and economy of medieval England?

SOURCE 2 Canterbury Cathedral in Kent, England. This is a typical example of Gothic architecture.



Did you know?

In 2019, one of the most beautiful and iconic representations of medieval Gothic architecture, Notre Dame Cathedral in Paris, was badly damaged in a devastating fire. The probable cause was an electrical fault in the old building, which destroyed the roof and spire. It has now re-opened, and the French government hope to have it fully restored by 2027.

The Catholic Church was led by the Pope, a role that traced its origins to St. Peter's founding of the Roman church. After the fall of the Western Roman Empire in 476 AD, the Pope's power grew, especially under Pope Gregory the Great (590–604). Gregory transformed the papal power by effectively governing Rome when its old systems had collapsed, reorganising the structure and leadership of the Church, and spreading Christianity through missionaries. This new papal authority continued to grow through the Early Middle Ages, with later popes building significant alliances with powerful rulers like Charlemagne, who was crowned by the Pope in 800 AD. These political partnerships made the Pope very powerful – monarchs wanted his support because his approval made them look good and righteous in the eyes of their people.

12.9.2 The hierarchy of the Church

Cardinals, **archbishops** and **bishops** supported the Pope, advised lords and monarchs, and held key government positions. Below them were parish priests, **nuns**, monks, and friars. These clergy took the Church's message to villages and collected taxes called tithes, which were 10 per cent of a person's income or produce.

Anyone acting against the Church could be excommunicated, meaning they couldn't attend Mass or receive **sacraments** and were told they would go to hell. The Church instilled fear of hell in everyone.

12.9.3 The parish church and the cathedral

Almost every village had a parish church, often the largest building and made of stone or brick. Built by unpaid peasant labor, the parishioners would have felt a sense of achievement and communal ownership. Church walls and stained-glass windows depicted Bible scenes to teach the mostly illiterate congregation. Church bells helped people keep track of time. The church was also a community centre and school for those studying for the priesthood.

The bishop's church — the cathedral

Many European cities have at least one **cathedral**, some built in the Middle Ages. The word 'cathedral' comes from the Greek word 'kathedra', meaning seat, referring to the bishop's seat or throne. The bishop ran his diocese from the cathedral, which was divided into parishes.

The cathedral's importance was reflected in its size and magnificence, towering over other buildings. Many cathedrals took over a hundred years to build and were completed long after their architects had died.

12.9 SkillBuilder activity QUESTIONING AND RESEARCHING

You have learnt about the power of the Catholic Church and the Pope in the medieval period. However, you know that, whilst there are still many people who follow the Catholic religion today and the Pope is still the head of the Church, it does not govern our lives in the same way that it did for the people of the Middle Ages. Some of this can be traced back to the growing concern of medieval people about corrupt practices they saw in some of the clergy.

Francesco Petrarca (Petrarch) was an Italian scholar and poet of the fourteenth century. He was a devoted Catholic himself and visited Avignon to stay with a mentor of his, a cardinal.

Read the extract from his letter and answer the guiding questions below.

SOURCE 3 Petrarch, Letter to a friend, 1340–1353

...Now I am living in France, in the Babylon of the West. The sun in its travels sees nothing more hideous than this place on the shores of the wild Rhone, which suggests the hellish streams of Cocytus and Acheron. Here reign the successors of the poor fishermen of Galilee; they have strangely forgotten their origin. I am astounded, as I recall their predecessors, to see these men loaded with gold and clad in purple, boasting of the spoils of princes and nations; to see luxurious palaces and heights crowned with fortifications, instead of a boat turned downward for shelter.

Source: from J. H. Robinson, *Readings in European History* (Boston: 1904), p. 502.

1. List the words and phrases that show he hates Avignon.
2. Find evidence to show that he thinks the clergy in Avignon are corrupt.
3. Draw conclusions about what he thinks they should be like instead.
4. **Write** a list of questions that Petrarch might have for the Pope and then share your ideas on why people began to doubt the overwhelming power of the Church.

12.9 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 4

■ LEVEL 2

3, 5, 6, 9

■ LEVEL 3

7, 8, 10

REMEMBER AND UNDERSTAND

1. No particular religious institution dominated western Europe during the Middle Ages. True or false?
2. **Latin/Italian/vernacular/English** was used in the medieval Mass.
3. **Recall** who was the head of the Roman Catholic Church and what power he had.

- Unpaid _____ did most of the work in building the parish _____. The sense of achievement and communal _____ made people feel part of the _____.
- Explain** why cathedrals were so enormous.

ANALYSE AND APPLY

- Compare** and **contrast** **SOURCE 1** and **SOURCE 2**. **State** which one was a more effective way of making an impression on the medieval population. **Explain** your answer in detail.
- Explain** why you think that the Catholic Church ensured that medieval people feared the idea of hell.
- State** some of the methods that the parish churches used to create a sense of community.
- Identify** five ways the Roman Catholic Church demonstrated its power over the people of medieval Europe.

EVALUATE AND COMMUNICATE

- Construct** a diagram that illustrates the hierarchy of the Church.

Answers and sample responses for this topic are available online.

LESSON 12.10 The power of the written word

LEARNING INTENTION

By the end of this lesson you should be able to

- explain** the importance of the medieval manuscripts of monastic scribes in holding ancient and medieval texts as well as passing on the ideas
- understand** the importance of developing the technology of books as beautiful artworks.

Tune in

Medieval manuscripts were handwritten and took a long time to complete. Many also had illustrations, which were called illuminations. They often started with a historiated initial, a decorative, enlarged letter containing a scene that illustrates the text.

SOURCE 1 A medieval illuminated manuscript from the Czech Republic



- Look closely at **SOURCE 1** and see if you can identify any of the following used in this manuscript:
 - the language
 - the colours
 - the image in the historiated initial
 - the layout.
- Discuss its similarities with modern books and the key differences you can see.

12.10.1 The role of monks and monasteries

SkillBuilder discussion

Analysing

1. Refer to **SOURCE 2**.
What can we learn about the role of education in medieval society from this illustration?
2. How does the illustration depict the relationship between the boy, his parents, and the monastic school?
3. What details in the image suggest the importance of monastic schools in the thirteenth century?

Did you know?

Religious life was the main way that a woman could gain more freedom in medieval society. A great example of this is Hildegard of Bingen. Born in the 12th century, she emerged as one of the most remarkable figures of the Middle Ages. As the leader of a Benedictine abbey in Germany, she showed talent in a range of areas: she composed religious music, advanced the study of medicine and natural science, and recorded her mystical visions through detailed illustrations as well as other areas. She influenced popes and monarchs during a time when women rarely held such authority. Hildegard's diverse achievements in theology, medicine, music and literature have established her as one of the medieval period's most distinguished intellectuals.

An important feature of early Christianity was the role of monks, nuns and the communities in which they lived. A monk or nun was a person who chose to withdraw from society in order to live according to strict Christian principles. Communities were formed, with rules governing every aspect of their lives in order to ensure their obedience to God. These communities of monks lived in monasteries; nuns lived in convents. Many communities were built in isolated places, both for their protection and to free them from worldly distractions and influences.

Some played important roles in the community. Many had schools attached to them. The monks were some of the only people who could read and write in these times and they passed this on to their young novices (see **SOURCE 2**).

Justice and law were dispensed by the abbot (the leader) in the towns that developed around the monasteries or convents. People gave money in the belief that this would please God. Sometimes people were forced to pay taxes to the religious community for the use of their land or to sell produce in the markets. This made some of them very rich and powerful.

SOURCE 2 A thirteenth-century illustration showing a boy being brought by his parents to a monastic school



12.10.2 Literacy in the Middle Ages

The Church was the main source of literacy during the Middle Ages. Before the printing press, every book had to be handwritten. Monks and sometimes nuns wrote, copied and decorated books by hand. These books were used to teach students. By copying them, they saved many classical texts from Greece and Rome, which were written on fragile parchments. Translating these texts into Latin made them more accessible, as Latin was widely read and understood.

Many ancient ideas also came into Europe through the Moorish Arabs in Spain, who valued books and libraries. This gave them access to the ideas of many great ancient philosophers.

12.10.3 Illuminated manuscripts

Creating a book, or manuscript, in medieval times was extremely laborious. It started with the preparation of the writing material (parchment) or its finer version (vellum). This was animal skin that was prepared by scrapping and stretching, until a smooth and durable surface was created. This was trimmed to the size needed. The scribe would write on the parchment using a quill and ink. The quill was a feather cut to a fine point and dipped in ink, which was made from some minerals or vegetable dye.

Once the scribe finished writing, an illuminator would illustrate the text. These illuminations were as important, or even more important, than the words. Illuminators sketched and painted images beside the text, including decorated letters and illustrations. They used precious metals, dyes and minerals for colours, which are still beautiful today (see **SOURCE 3** from the *Book of Kells*, a gospel from medieval Ireland).

Later, the printing press was invented around 1440 by Johannes Gutenberg in Germany. This made illuminated manuscripts obsolete. The printing press allowed ideas to spread much faster, as books and pamphlets could be created quickly. Historians credit this spread of ideas with helping to start the Renaissance.

SOURCE 3 An illuminated letter from the *Book of Kells*



12.10 SkillBuilder activity ANALYSING

Written and illustrated by twelfth-century French nun Herrad of Landsberg, the *Hortus Deliciarum* (*Garden of Delights*) is a beautifully illustrated compendium of other twelfth-century texts, such as poems, texts by classical writers, illustrations and music.

Herrad of Landsberg was the abbess (leader) of a convent. She collected the texts and also wrote a number of the poems with messages to her fellow nuns. It is thought that she drew the illustrations as well, of which there are over 300.

The original was destroyed in a fire around 1870, but luckily fragments were copied and saved. This is a rich text that tells modern historians much about the time in which it was created, but also about the extraordinary woman who was Herrad of Landsberg.

Conduct research to find fragments of the illustrations from the *Hortus Deliciarum*. Collect these digitally as a class and **compare** the different sections.

- What texts and illustrations did you find?
- What do these tell historians about Herrad and her community, as well as the times in which she lived?

SOURCE 4 The illustration of Hell in the *Hortus Deliciarum* by Herrad of Landsberg



12.10 Exercise

learnon

Learning pathways

LEVEL 1

2, 3, 4

LEVEL 2

1, 5, 8, 9

LEVEL 3

6, 7, 10

REMEMBER AND UNDERSTAND

1. **Explain** why someone might become a monk or nun.
2. **Recall** how people could gain an education in the early medieval period.
3. Medieval religious communities contributed to the survival of many ancient _____ and _____ literary texts.
4. Recall what vellum and quills were made of.
 - A. Animal skins and feathers
 - B. Velvet and feathers
 - C. Animal skins and sticks
 - D. Papyrus and metal
5. Are the following statements true or false?
 - a. The illuminations, or drawings, in a medieval manuscript are so named because the precious metals used shone and caught the light thus illuminating the text.
 - b. The Church was one of many sources of literacy during the Middle Ages.
 - c. Illuminated manuscripts became obsolete when the printing press was invented.
 - d. Many ancient Roman and Greek texts were destroyed forever due to the process of copying them for teaching purposes.

ANALYSE AND APPLY

6. **Examine SOURCE 2.** What conclusions can you draw about the Church and its importance to people of the time?
7. **Analyse SOURCE 3** and **explain** how it was created.
8. **Explain** the difference between a scribe and an illuminator.
9. **Explain** why Latin was such an important language in medieval times.

EVALUATE AND COMMUNICATE

10. Imagine that you are a young novice entering the convent of Herrad of Landsberg in Alsace, France. **Describe** the advantages that you would have as a nun in this protected abbey, compared to if you had remained in secular society.

Answers and sample responses for this topic are available online.

LESSON 12.11 Inquiry: The Magna Carta

LEARNING INTENTION

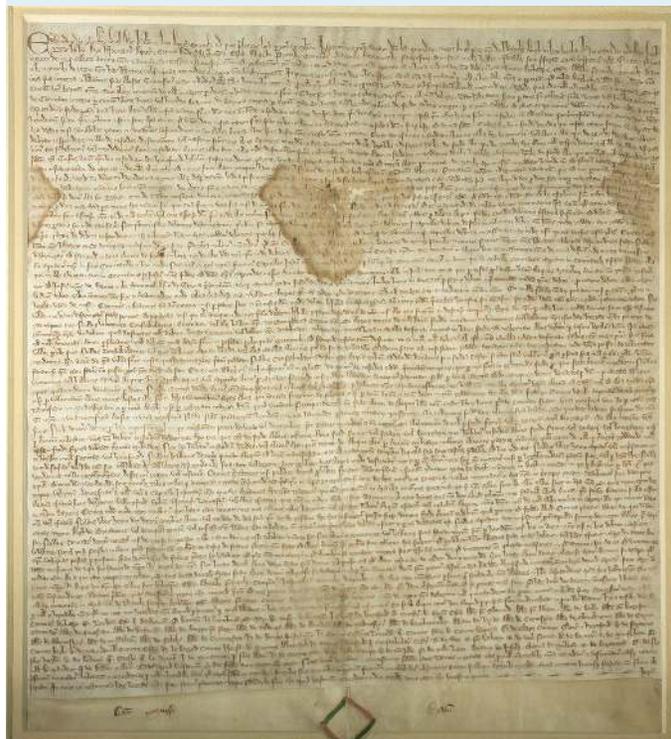
By the end of this lesson you should be able to:

- **ask** historical questions about the impact of the *Magna Carta* on different social groups
- **develop** specific questions that will direct your investigation.

Background

The *Magna Carta* is a royal charter of rights that was signed by King John of England and his barons in 1215. It was designed to create peace between King John and his barons by ensuring that, from the moment it was signed, the monarchs of England were bound by the law and could not just make their own laws as it suited them. King John of England had been particularly disliked because he was seen to be an unfair king who taxed his barons heavily to pay for the wars he kept fighting, among other things. The barons eventually revolted and the conflict came to a head when they presented King John with a list of demands at Runnymede in 1215. He signed what became known as *Magna Carta* (the Great Charter) and they re-swore their feudal oath of loyalty to him.

SOURCE 1 The *Magna Carta* (1297 version, Parliament House, Canberra, Australia)



Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

Choose one of the groups listed below and **create** focused research questions that you could use to **investigate** the impact of the *Magna Carta*. **Construct** your inquiry question.

- Nobility
- Religious orders and the Church
- Merchants
- Artisans/craftspeople
- Peasants

Use the following question starters to **construct** some questions that might help to direct your research about your chosen group.

- For example:
 - Who was ... ?
 - How significant was ... ?
 - What effects did ... ?

Investigate your question.

You may use a variety of sources including websites to begin making notes to answer your research question. The following websites may be helpful:

- the *Magna Carta* in the British Library
- the *Magna Carta* in the UK National Archives
- the significance of the *Magna Carta* to Australians

Step 2: Analysing

Analyse the information you have found. **Determine** whether it answers the inquiry question.

Step 3: Evaluating

Collate your information by using your research notes to **propose** answers to your amended research questions. Remember that your original task was to investigate the *Magna Carta* and the impact that it had on one of the following social groups:

- Nobility
- Religious orders and the Church
- Merchants
- Artisans/craftspeople
- Peasants

Step 4: Communicating and reflecting

Discuss with your teacher and class how you would like to present this information.

LESSON 12.12 The changing relations between Islam, Christianity and Judaism

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the changing relations between Islam and Europe
- **explain** the Catholic Church's attitude towards medical science during the Middle Ages.

Tune in

Religion still plays a very important part of daily life in Australia today. The Australian census in 2021 revealed that only 38.9 per cent of the population wasn't religious.

While people still pray for those who are sick, as seen in **SOURCE 1**, medical science is more often relied upon for treatment. What do you think prompted this change?

1. **Discuss whether you think religion should play a part in treatment for illness and disease. What benefits can it bring, and what challenges can it create?**
2. **Brainstorm the ways in which being part of a religious community can help in daily life.**
3. **In the past, people prayed when someone was sick. Today, while many still pray, most people go to doctors and use medicine first. What do you think caused this big change in how we treat illness? Give some examples from what you've learned about history.**

SOURCE 1 Prayer for the sick was considered to be more important than medical science.



12.12.1 The importance of religion

Religious beliefs, especially those stemming from the Roman Catholic Church, were central to medieval European life. People believed good things were rewards for good deeds and illness was a punishment. Most people were illiterate and superstitious, relying on priests for education and guidance. Non-Christians were viewed with suspicion and hatred. When bad things happened, people looked to the Bible for explanations, often believing they were being punished for their sins.

Islamic leaders turned to sacred texts for guidance during times of plague, drawing on three key principles: (1) Plague was viewed as a mercy from God and a form of martyrdom for faithful Muslims; (2) Muslims were advised not to enter or leave areas affected by plague; and (3) Illness was believed to originate from God, rather than through contagion. While these principles were not always consistently

observed, they illustrate one of the many ways in which different societies, including those with interconnected cultural and religious traditions, responded to disease.

12.12.2 Religion and medical science

Because the Church controlled every aspect of education, the training received by medieval doctors had to be in accordance with religious teachings. All medical education carried out in universities was strictly in line with the beliefs of ancient physicians like Hippocrates and Galen. No new research was permitted because it was believed that the ancient teachings were complete and could not be contradicted. In 1300, Pope Boniface VIII prohibited the cutting up of corpses, so any attempt to study human anatomy was virtually impossible. This meant that even the most educated doctors had very little knowledge of human anatomy, making treatment of sickness difficult and any form of surgery almost impossible. **SOURCE 2** shows the limited understanding most doctors were working with.

Doctors and priests

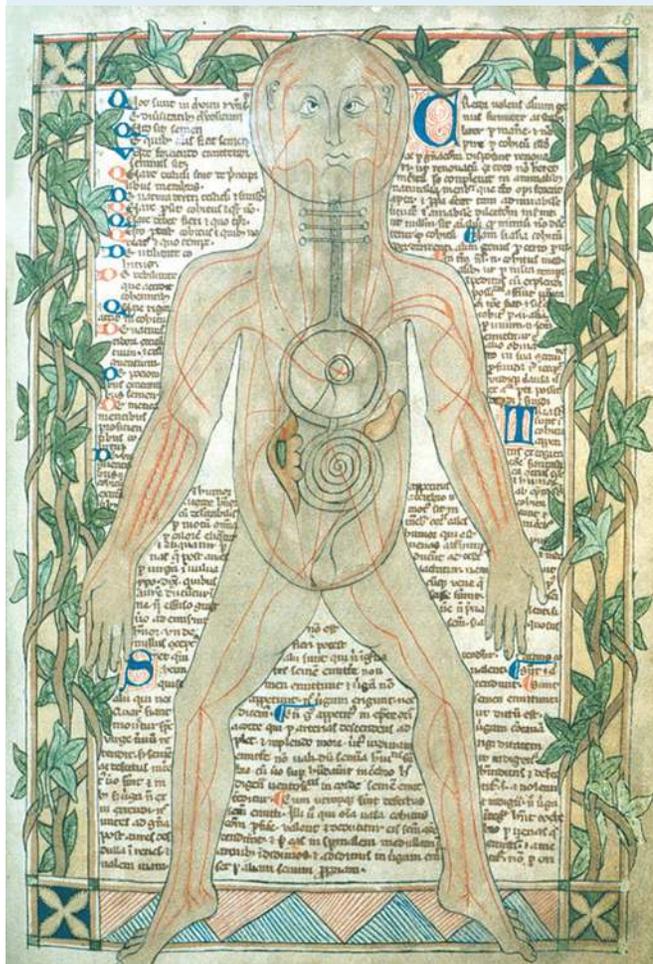
Priests often took precedence over doctors, meaning that the doctor was permitted to assist only once the praying was finished. If the patient was important or wealthy, there might be a whole group of churchmen to offer prayers — depending on how advanced the disease was, the patient may be dead before the doctor was even allowed in the room.

12.12.3 Religious conflict

By the beginning of the fourteenth century, virtually all of western Europe was Roman Catholic. The Arabic conquests during the seventh century and onwards, and the later expansion of the Ottoman Empire, meant that most of the Middle East and North Africa followed Islam. Christians and Muslims looked at each other with suspicion, largely as a result of the Crusades and the efforts of Spanish Christians to recapture Spain from Muslim control. Since both religions viewed illness as a form of divine punishment, the people of each religion blamed the other for the Black Death when it ravaged their people. There were some unhelpful theories that Jewish people were less likely to catch the plague, and this led to accusations that they were poisoning the wells to make other people sick. This led to pogroms and massacres of Jewish communities (see **SOURCE 3**).

Despite Pope Clement issuing a decree declaring Jewish people innocent, the **persecution** continued from 1348 until the early 1350s throughout most of Europe.

SOURCE 2 This late thirteenth-century illustration of the human body was meant to display the flow of blood through the body.

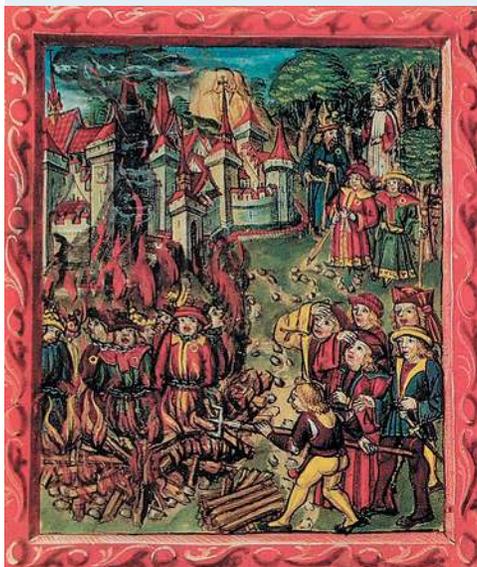


SkillBuilder discussion

Analysing

1. Look at **SOURCE 3**. What purpose did forcing Jewish people to wear yellow badges serve in medieval society?
2. What message was the artist trying to communicate through this illustration?
3. How can studying this historical persecution help us address discrimination today?

SOURCE 3 A medieval illustration showing a group of Jews being burnt at the stake. Jewish people were required to wear a yellow circle badge to identify themselves.



12.12 SkillBuilder activity

COMMUNICATING AND REFLECTING

Ibn Khaldun was an Islamic scholar who has given us great insight into the Black Death across the Middle East and Europe. Your task is to **create** a one-page biography to help other Year 8 students understand his influence.

To begin, **investigate**, by conducting research, and find three points of interest on each of his:

- life
- philosophy
- publications.

Ensure you use and refer to multiple sources. Include an accurate biography to show which references you used.

Demonstrate your understanding of the medieval period through your writing and remember your audience and purpose.

Your biography could be a visual one with annotations and shorter chunks of information.

12.12 Exercise

learnon

Learning pathways

■ LEVEL 1

2, 3, 5

■ LEVEL 2

1, 6, 7

■ LEVEL 3

4, 8, 9, 10

REMEMBER AND UNDERSTAND

1. **Describe** the attitude of the medieval Church towards medical science.
2. Are the following statements true or false?
 - a. There was a great deal suspicion between Christians and Muslims during the Middle Ages.
 - b. Cultural differences led to a great deal of discrimination.
 - c. Different religious communities worked together to find the source of the disease.
 - d. Doctors were considered to be more important than priests in the treatment of the sick.

- Why did Islamic leaders suggest that a Muslim person 'should not enter nor flee from a plague-stricken land'?
 - They believed Muslims could not get sick.
 - They believed the plague was spread by people.
 - They feared being blamed for the plague.
 - They were told to say that by the Christians.
- Based on the evidence you've been provided, **identify** which group Christians blamed for the Black Death.
- During the fourteenth century, Muslims and Christians viewed illness as a form of _____.

ANALYSE AND APPLY

- Propose** a reason why Pope Boniface may have forbidden the dissection of corpses.
- Identify** two inaccuracies in the diagram of the body shown in **SOURCE 2**. **Explain** what prevented medieval doctors from finding out more about the human body.
- Identify** one way that the activity depicted in **SOURCE 1** could actually hinder medical treatment for illness.
- Explain** how we know that the people being burned in **SOURCE 3** were Jewish.
- Identify** an example of discrimination you were aware of during the COVID-19 pandemic.

Answers and sample responses for this topic are available online.

LESSON 12.13 The Black Death

LEARNING INTENTION

By the end of this lesson you should be able to:

- explain** what the Black Death was
- identify** the origins of the Black Death.

Tune in

The Black Death was caused by the **bubonic plague**. This was a devastating plague that occurred at a time when little was known about how to control or treat disease.

The Black Death has returned many times, even recently enough that we have been able to photograph and document it.

- Brainstorm five reasons why diseases like this keep returning.**
- Examine SOURCE 1. What appear to be the symptoms of the bubonic plague?**
- Discuss the modern-day versions of the bubonic plague. What are they? Will they go away?**

SOURCE 1 The bubonic plague was so named because of the appearance of 'buboes', which were swellings of the **lymph nodes**.



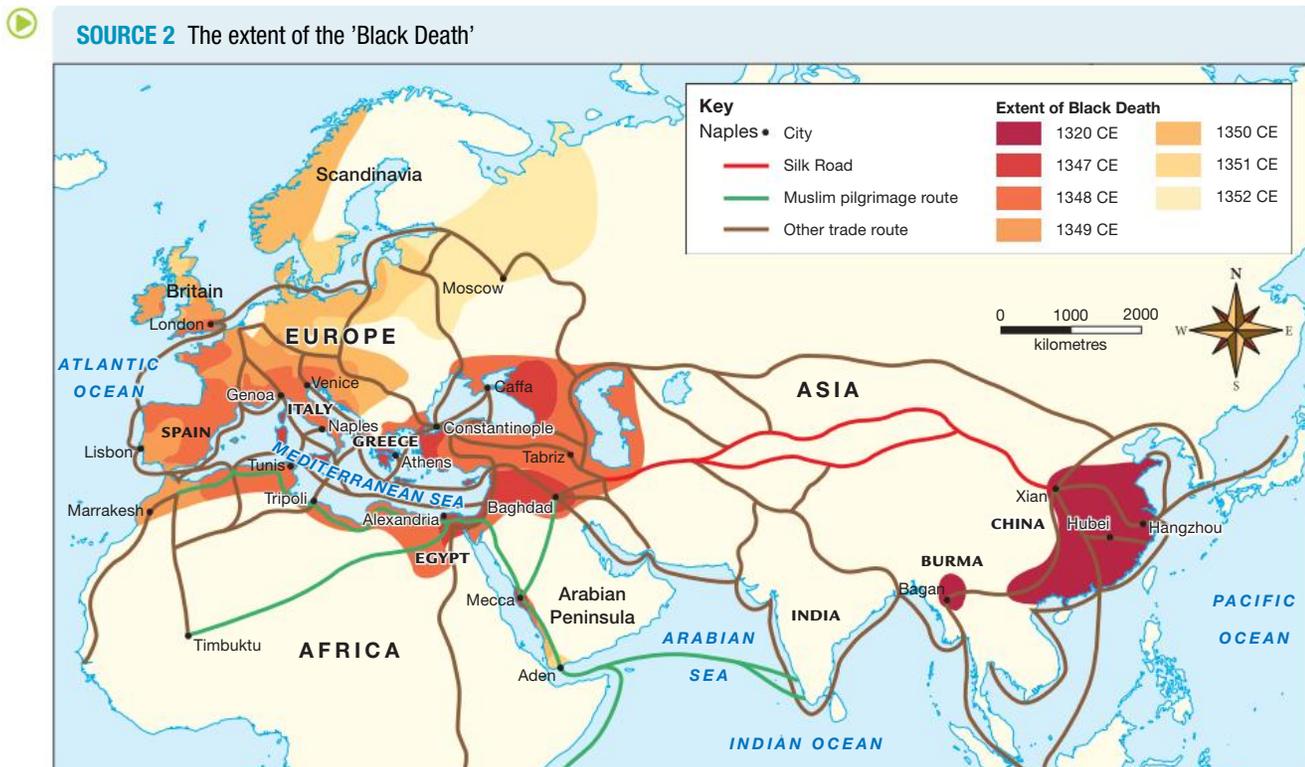
12.13.1 Introduction

In the mid-1300s, people across the Middle East, Africa and Europe were suffering from a terrible plague, often referred to as the Black Death. It killed millions of people and, at the time, nobody knew what caused it. With our modern knowledge, we understand that fleas carried on rodents infected humans, but it was a terrifying time for those living through it.

Why 'Black Death'?

This name was first used in the 1700s (a long time after the actual event). People at the time simply called it 'the great dying' or 'the plague'. It has been given many names over the years, such as *morte bleue* (French for 'blue death'), *pestis atra* (Latin for 'terrible plague') and *magna mortalitas* (Latin for 'the great dying').

There are a few theories about the origin of the English name 'Black Death'. The most popular of these comes from the appearance of the disease in its final stages. At this time, small black or purple blotches appeared on the skin of those suffering from the disease as seen in **SOURCE 1**, and this may have contributed to the name.



Source: Map drawn by Spatial Vision.

Historians now believe there were three diseases spreading at once during the plague.

1. **Bubonic plague:** The most recognisable, with swelling, pus-filled lumps called 'buboes' appearing in the armpits, groin, and neck. Recovery was possible, but other diseases made it less likely.
2. **Pneumonic plague:** Attacked the lungs and was always fatal.
3. **Septicaemic plague:** Aggressively attacked the bloodstream. The bacteria multiplied so fast that the person would die within hours of infection, causing purple-black blotches on the skin (see **SOURCE 1**).

12.13.2 Origins and spread of the plague

Origins

Bubonic plague is found, and is **endemic**, in western Arabian Peninsula, Kurdistan, northern India, and the Gobi Desert. It usually stays **dormant** but has caused major **pandemics** at different times. One theory is that, during the time of the Black Death, climate change forced rodents to move, spreading the fleas that carried the plague.

SkillBuilder discussion

Evaluating

1. How did fleas living on black rats transmit the bacteria that caused the Black Death to humans?
2. What role did black rats play in the spread of the Black Death across Europe?
3. How might living conditions in medieval Europe have contributed to the spread of the Black Death through fleas and rats?

SOURCE 3 The bacteria that caused the Black Death were transmitted by fleas living on the bodies of black rats.



Did you know?

When a flea became infected with the plague bacteria, the bacteria would multiply quickly and block the flea's feeding tube.

This would make the flea very hungry. It would try to feed on the blood of a host (an animal or human) but could not swallow the blood because of the blocked feeding tube.

The blood mixed with the bacteria would be **regurgitated** and enter the host through the open wound, leading to a new infection.

Transmission of the plague

In 1894, scientists identified a bacterium they called *Yersinia pestis* as the cause of all three forms of the plague. These bacteria were spread by different types of fleas, especially those living on black rats. When rats thrived, fleas could bite other animals and humans, spreading the bubonic or septicaemic plague. Fleas could bite many people, increasing the infection rate.

Pneumonic plague was the most contagious because it infected the lungs. It caused severe coughing, spreading bacteria into the air. Anyone nearby could breathe in the bacteria and get infected.

12.13 SkillBuilder activity **EVALUATING**

When living through catastrophic events such as a global pandemic, sometimes it's easy to forget that history books will look back at these times as areas of study. Consider the ways in which we are examining a pandemic nearly 1000 years ago and compare that to how the COVID-19 pandemic might be studied in future years. ▶

- List** any sources people might use to better understand the time of COVID-19. You might like to include different sources that can help with examining:
 - social responses
 - religious responses
 - political responses
 - medical responses.
- Compare** these with the sources used in this lesson. **Determine** whether there are correlations (connections or relationships) between sources of the past and those you've chosen to highlight the impact of COVID-19.

12.13 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 5

■ LEVEL 2

3, 4, 7

■ LEVEL 3

6, 8

REMEMBER AND UNDERSTAND

- Based on the descriptions provided, **identify** each of the three forms of the Black Death as either bubonic, pneumonic or septicaemic.
 - This form of the plague attacked the lungs and was always fatal.
 - This form aggressively attacked the bloodstream and was characterised by bleeding into the skin, causing purple–black blotches to appear.
 - This form was characterised by pus-filled swellings of the lymph nodes in the groin, armpits and on the neck.
- When a disease is normally located in one place, it is called _____.
- Describe** what buboes are.
- Identify** two parts of the world in which bubonic plague appears to be endemic.
 - Explain** why these parts of the world do not suffer from the plague all the time.
- Are the following statements true or false?
 - SOURCE 1** suggests that the Black Death was given its name because of the dark times that people were experiencing.
 - Pneumonic plague was the most contagious form of the disease.
 - Septicaemic plague aggressively attacked the lungs.

ANALYSE AND APPLY

- State** the current popular theory explaining why the plague suddenly moved beyond its endemic environment.
- Examine** the different names used for the Black Death. **Describe** what these imply about the understanding of disease people had and the effect it was having on their daily life.

EVALUATE AND COMMUNICATE

- Construct** a plan for a health alert poster helping people identify the symptoms of each type of plague associated with the Black Death. Your plan should include headings for each type of plague, with dot points beneath about the information you would include in your poster, and the images or diagrams you might include.

Answers and sample responses for this topic are available online.

LESSON 12.14 How did plague spread?

LEARNING INTENTION

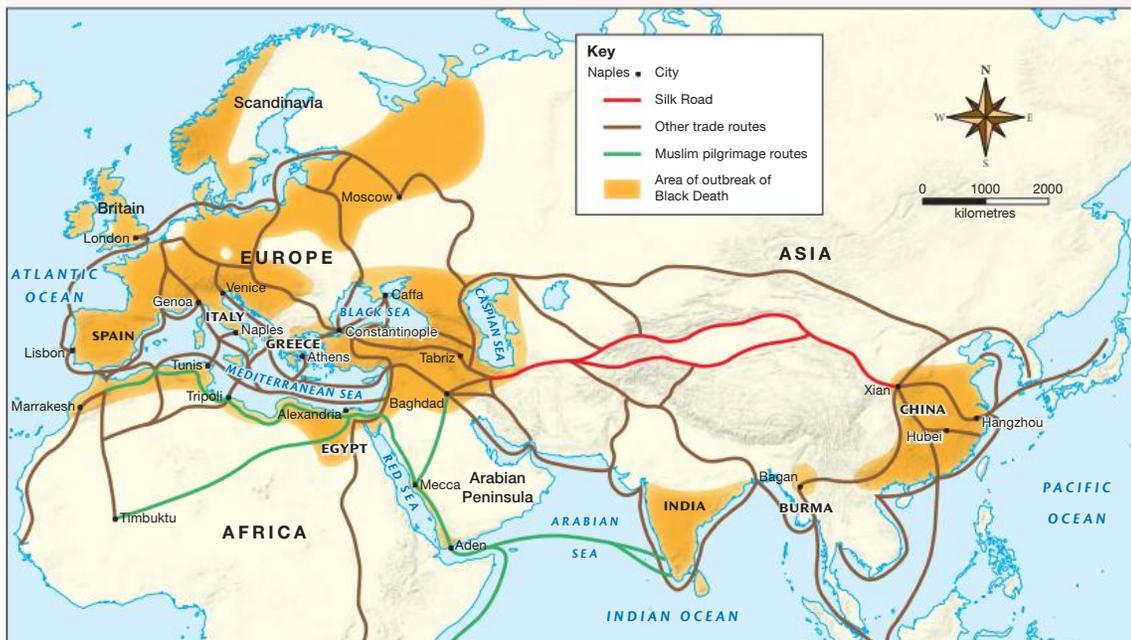
By the end of this lesson you should be able to:

- **explain** the role of trade in the spread of the bubonic plague
- **describe** the distribution of the Black Death across three continents.

Tune in

Examine **SOURCE 1** and consider the relationship between trade and the spread of the disease.

SOURCE 1 Permanent human settlement led to the growth of towns and expansion of trade, which allowed the Black Death to spread more easily.



In groups, discuss the following questions.

1. Why did people need to trade so much?
2. There are some areas which were affected by the plague earlier than others — why do you think that is?
3. Why are there large areas of the world unaffected — do you believe that they did not have any plague at all during this period?

12.14.1 Settlements and trade

The early fourteenth century was a time of rapid expansion of trade between Europe, North Africa and Asia. Wherever people traded, black rats and their disease-carrying fleas followed. Disease that had previously been confined to an area in Central Asia soon spread to populations that had no immunity to its infection.

Human settlement in the fourteenth century

The early medieval era saw many nomadic groups moving through Europe and Asia, invading new lands. Over time, these groups settled and established permanent villages and towns, which became centres of agricultural activity.

- Franks, Magyars and Goths transitioned from warriors to farmers.
- Vikings and Danes shifted from raiding to peaceful trade.

By the 14th century, most of Europe, southern and eastern Asia, and northern Africa were permanently settled. Nomadic lifestyles persisted mainly in northern and Central Asia and sub-Saharan Africa.

The growth of trade

Settled civilisations were quick to realise the benefits of peaceful trade. Networks of overland trade roads developed throughout Europe, the Middle East, Africa and Asia, connecting the rapidly growing towns and leading to the growth of some towns as major trading centres. These towns would regularly hold fairs to allow merchants to display and sell their wares. Major commercial **city-states** such as Genoa and Venice sent ships throughout the Mediterranean and to western and northern European ports. Trade between Europe and Asia expanded rapidly along the Silk Road, with China and many other centres through Central Asia coming into regular contact with European merchants.

12.14.2 Outbreak in Asia

Archaeological evidence suggests that the Black Death may have originated in China in the 1320s and 1330s.

- The first major outbreak likely occurred in Hubei province in 1334.
- Inscriptions in Issyk-Kul, Kyrgyzstan, suggest it may have started there, which provides an alternative theory.
- In the 14th century, China was largely ruled by the Mongols, who had strong links to Central Asia and may have brought the disease across.
- Increased trade between China and Europe via the Silk Road increased the potential for the Black Death to spread to Europe.
- European traders or Central Asian Tartar warriors (Mongols) could have carried the disease to Europe.

The siege of Caffa

In the thirteenth century, the Italian trading city of Genoa had taken control of Caffa, on the Crimean Peninsula, in modern-day Ukraine. Caffa was a major shipping port for trade throughout the Black Sea. In 1346 the Tartars attacked the city. They were supported by Genoa's bitter rivals, the Venetians, who had previously controlled Caffa. As they laid siege to the city, the Tartars began to fall sick from a serious disease and large numbers died in a very short time. Unable to maintain the siege, the Tartars began to withdraw, but before they did, they began catapulting the diseased bodies of their dead over the walls and into the city (see **SOURCE 2**). The Genoans who escaped from Caffa soon found they were carrying the Black Death. Venetian traders who had been present during the siege were also infected and both groups carried the deadly disease deep into the heart of Europe (see **SOURCE 3**).

SkillBuilder discussion

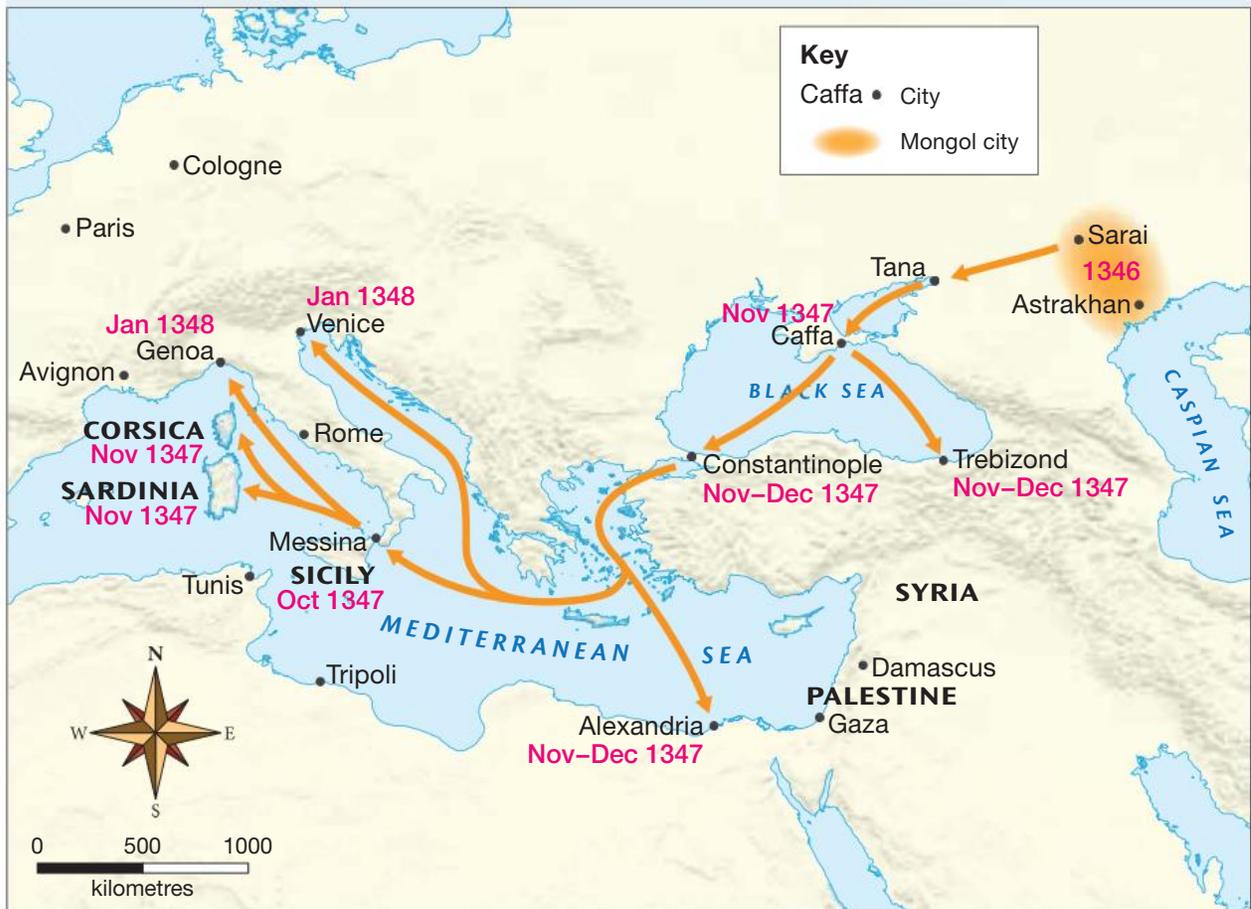
Questioning and researching

1. How did the use of infected bodies as projectiles impact the spread of disease within the besieged city of Caffa?
2. What does this tactic tell us about the methods of warfare used during medieval sieges?
3. How might the defenders of Caffa have responded to this form of biological warfare?

SOURCE 2 When the Tartars attacked Caffa, they used trebuchets like the one shown in this illustration to catapult infected bodies over the city walls.



SOURCE 3 Merchants and soldiers returning from Caffa in late 1347 soon spread the Black Death to the Middle East, North Africa and Italy.



How important was Caffa in the spread of the Black Death?

Trade links between Asia and Europe were developing so strongly during the fourteenth century that Caffa was probably not the only source of the Black Death coming to Europe. The city of Messina in Sicily first recorded the plague shortly before the siege of Caffa. Nevertheless, the rapid spread to places that engaged in trade with Caffa suggests that it was important in hastening the disease into Europe, the Middle East and North Africa. During the last few months of 1347, the disease was carried to Constantinople, the southern shores of the Black Sea, Alexandria in Egypt and the islands of Sicily, Corsica and Sardinia in the Mediterranean. Most of this spread appears to have originated in Caffa.

12.14.3 The spread through the Middle East, Europe and North Africa

The Middle East

The plague reached the Middle East through multiple routes:

In 1347, warriors returning to Baghdad from Tabriz in northern Persia brought the disease. Black rats infested their grain supplies and fleas carrying the plague survived on grain debris. The region, including modern-day Iraq, Syria and southern Türkiye, was soon ravaged.

Pilgrims travelling to Mecca from northern India via the Persian Gulf and the Red Sea may have transported rats from Central Asia, spreading the plague to the Arabian Peninsula.

Alexandria, a major trading port with links to Constantinople and Arab cities, was infected in 1347, soon after the siege of Caffa.

The Black Death spread eastwards to Palestine and Syria in 1348, reaching Mecca.

SOURCE 4 From Al-Maqrizi's account of Alexandria

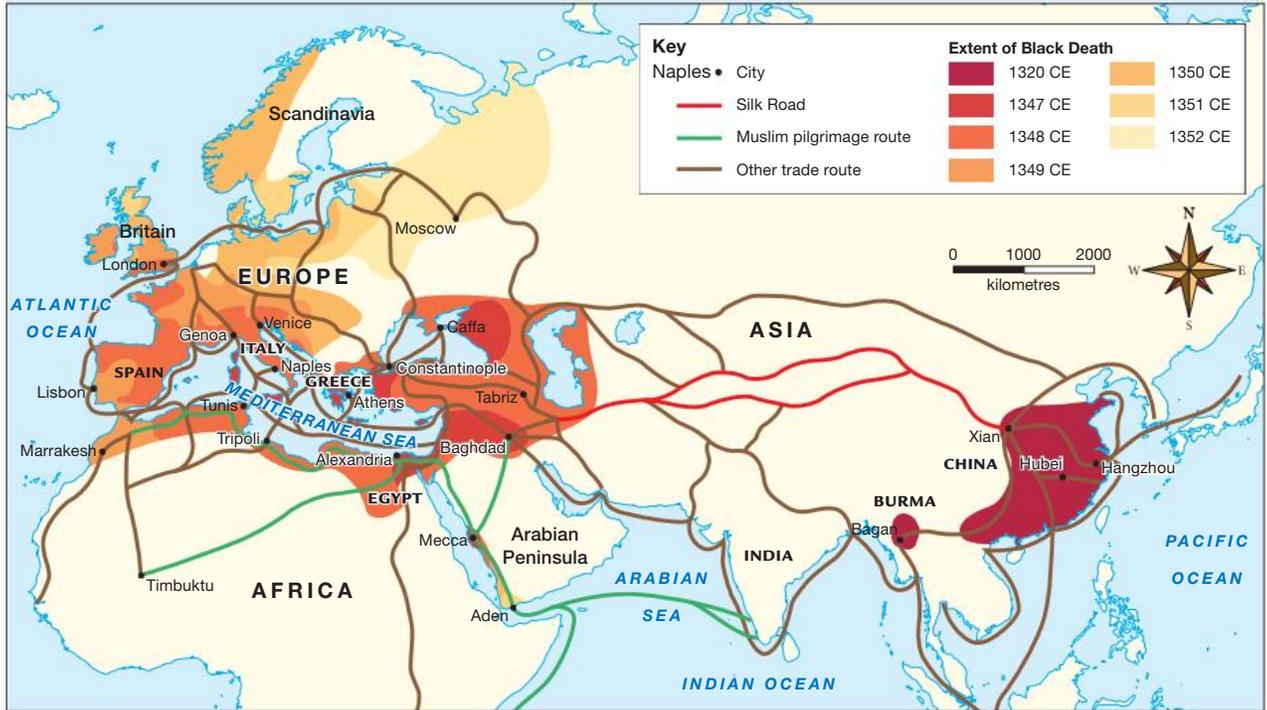
A ship arrived in Alexandria. Aboard it were thirty-two merchants and a total of three hundred people — among them traders and slaves. Nearly all of them had died. There was no one alive on the ship, save four of the traders, one slave, and about forty sailors. These [forty-five] survivors soon died in Alexandria.

Europe

By January 1348, cases of the plague were reported in both Genoa and Venice in northern Italy. From there it quickly spread to the rest of Italy, and to southern France and Spain by the middle of that year. Within a year all of western Europe was affected and, by 1350, the Black Death had turned east again and had reached Russia. **SOURCE 5** shows how quickly the Black Death spread throughout Europe between 1348 and 1351.



SOURCE 5 The Black Death spread like a wave across Europe between 1348 and 1351.



Source: Map drawn by Spatial Vision.

SkillBuilder discussion

Analysing

1. According to the text, how did the rich and poor people in Scotland experience the plague differently? Support your answer with evidence from the extract at **SOURCE 6**.
2. The author describes how sons wouldn't visit their dying parents. What does this tell us about how the plague affected family relationships?
3. In the extract, Fordun writes that this was the worst plague 'from the beginning of the world even unto modern times'. What words and descriptions does he use to show how serious and unusual this disease was?

SOURCE 6 Fordun's *Chronicle of the Scottish Nation* — Pestilence among men

In the year 1350, there was, in the kingdom of Scotland, so great a pestilence and plague among men (which also prevailed for a great many years before and after, in divers parts of the world — nay, all over the whole earth), as, from the beginning of the world even unto modern times, had never been heard of by man, nor is found in books, for the enlightenment of those who come after. For, to such a pitch did that plague wreck its cruel spite, that nearly a third of mankind were thereby made to pay the debt of nature. Moreover, by God's will, this evil led to a strange and unwonted kind of death, insomuch that the flesh of the sick was somehow puffed out and swollen, and they dragged out their earthly life for barely two days. Now this everywhere attacked especially the meaner sort and common people; — seldom the magnates. Men shrank from it so much that, through fear of contagion, sons, fleeing as from the face of leprosy or from an adder, durst not go and see their parents in the throes of death.

Did you know?

Some historians believe that fleas carrying the Black Death came to Caffa on the skins of marmots. These small Central Asian mammals had no resistance to the disease, and large numbers became infected and died in the mid-1340s. Fur traders came across the dead animals, removed their hides (including the deadly fleas) and sent them along the Silk Road to cities such as Caffa.

North Africa

There are several key points in the spread of the plague through North Africa.

- The plague spread from Alexandria along the North African coast, reaching Tripoli (Libya) and Tunis (Tunisia). At around the same time, Tunis was infected through trade with Sicily, with an outbreak reported in April 1348.
- The plague spread east into Libya, from both the east and west.
- In 1348 the Moroccan ruler's attempted and failed conquest of Tunis led to the plague spreading back to Morocco, infecting Algeria.
- The plague reached Marrakesh (central Morocco) in 1349 (although it is possible that Morocco was first infected by traders from Spain via Majorca).
- The plague spread south along the Nile valley but did not reach other parts of Africa.
- The areas most affected were settled areas with towns and agriculture, which supported black rats.
- In contrast, nomadic tribes south of Egypt and in the Sahara did not support rat populations, which prevented spread.

The plague lasted much longer in Egypt and Syria, with outbreaks over nearly 170 years.

Did you know?

The spread of the plague to Scandinavia is believed to have occurred through a trading ship carrying wool from England. The ship was seen floating off the Norwegian coast and the locals rowed out to examine it. They found the crew dead and decided to take the cargo of bales of wool. Little did they know the bales were full of the deadly plague-carrying fleas.

12.14 SkillBuilder activity

COMMUNICATING AND REFLECTING

Some areas of Europe, the Middle East and North Africa were hit harder than others. Use the **World map** template provided in the digital documents section of the Resources panel to chart the impact of the plague on particular regions.

First, plot each of these locations onto the map. You might like to use **SOURCE 1** to help you locate the original sites of some of these cities.

- London (62 000 deaths)
 - Paris (80 000 deaths)
 - Florence (70 000 deaths)
 - Constantinople (no reliable data)
 - Cairo (200 000 deaths)
 - Alexandria (no reliable data)
 - Gaza (no reliable data)
 - Tunis (no reliable data)
 - Baghdad (no reliable data)
 - Damascus (no reliable data)
 - Tabriz (300 000 deaths)
1. **Construct** a timeline of when these cities were infected by the Black Death. Some have been mentioned in this lesson, but you might need to do some additional research.
 2. **Construct** a colour gradient to show their chronology (for instance, the far left of the timeline might be red and each following event moves through the spectrum of the rainbow).
 3. Add these colours to your map to **demonstrate** the movement of the plague across the region.
 4. Use the mortality count next to each city in the list and make the point on your map bigger to **demonstrate** the size of the impact.

Learning pathways

■ LEVEL 1

2, 3, 5

■ LEVEL 2

1, 4, 6

■ LEVEL 3

7, 8

REMEMBER AND UNDERSTAND

1. **State** which areas of Europe, Asia and the Middle East had become permanent human settlements by the fourteenth century.
2. The Black Death's most deadly form first appeared in the _____ province in China.
3. Are the following statements true or false?
 - a. The city of Caffa was the source of infection for Europe and North Africa.
 - b. The plague lasted far longer in Egypt and Syria than in other affected areas.
 - c. The Egyptian city of Alexandria became infected before the siege of Caffa.
4. **Explain** why the Black Death primarily affected settled communities rather than nomadic ones.
5. How did the Tartars in **SOURCE 2** spread disease into the city of Caffa?
 - A. They released rats into the city.
 - B. The army brought it with them when they conquered the city.
 - C. They launched infected bodies over the walls.
 - D. They traded supplies for their journey which were infected.

ANALYSE AND APPLY

6.
 - a. **Define** the meaning of the word *pandemic*.
 - b. **Explain** why it is appropriate to refer to the Black Death as a pandemic.
7. **Identify** which group is thought to have brought the Black Death to China.

EVALUATE AND COMMUNICATE

8. Some historians have suggested that without trade, the Black Death may never have happened. **Explain** whether or not you agree with this statement. **Justify** your opinion using evidence.

Answers and sample responses for this topic are available online.

LESSON 12.15 Responses to the Black Death

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** medieval treatments for the Black Death and explain why they were not effective
- **explain** the religious responses to the Black Death in the Middle Ages.

Tune in

In the **SOURCE 1** engraving people are escaping from their village after setting the buildings on fire. The woman on the left appears to be performing the last rites for a plague-infected man.

The world was caught by surprise when COVID-19 began to spread. Why were we so unprepared for this situation if it had happened before?

1. Discuss why people may have turned to religion in the face of the Black Death.
2. Brainstorm the public response to COVID-19. How did people react to this pandemic?
3. Compare the reactions in both times. Identify any similarities and differences.

SOURCE 1 A fourteenth-century English engraving



12.15.1 Medical treatments

The strength and speed of the Black Death pandemic caught everyone in its path off guard. Medical science had no way of dealing with the outbreak and religious beliefs provided no protection against the onslaught.

Medieval doctors had no idea what had caused the Black Death and so they resorted to the traditional methods of treating illness. **Bloodletting** and the use of leeches were tried and failed to cure the disease. Attempts to cut into the buboes to remove the ‘bad’ blood often did little more than help spread the disease by exposing the doctors to the bacteria living in the blood.

A common belief in Europe was that disease came from **miasma**, or the bad smells that were often found in overcrowded towns. To counter this, doctors often encouraged their patients to sniff posies of fragrant flowers, bundles of herbs or sweet-smelling oils. In some cases, they even suggested that patients should breathe in the smell of human waste in the hope that one bad smell might overcome the more dangerous miasma.

SkillBuilder discussion

Communicating and reflecting

1. Read **SOURCE 2**. The writer compares the buboes (swellings) to two different food items. What are they, and why do you think these comparisons would help medieval readers understand what the buboes looked like?
2. List the words that the writer uses to show how painful these symptoms were for victims.
3. Looking at the date when this was written (1349), what does this Welsh account tell us about how far and how quickly the Black Death had spread across Europe after it first arrived in 1347?

SOURCE 2 A Welsh writer, who died in April 1349, described the buboes that appeared on the bodies of victims.

It is of the form of an apple, like the head of an onion, a small boil that spares no-one. Great is its seething, like a burning cinder, a grievous thing of an ashy colour. It is an ugly eruption that comes with unseemly haste. It is a grievous ornament that breaks out in a rash. The early ornaments of black death.

Doctors themselves began dressing in long hooded robes to protect themselves from infection. They would also wear a face mask that had a long beak-like structure at the front. This beak would contain sweet smelling herbs or oils, designed to filter any evil smells that the doctor might be exposed to.

Some towns resorted to the 'cure of sound'. They would loudly ring the church bells, or fire off cannons, in the hope that the noise would frighten the plague and drive it away. In addition to prayer, spells and charms of all sorts were used in the hope of driving away the evil. These included washing the skin with vinegar and rose water, or applying a mixture of tree resin, white lily roots and dried human excrement to buboes that had been cut open.

SOURCE 3 Doctors attempted to treat the plague by draining the bad blood from the buboes in this fourteenth-century fresco.



Did you know?

One plague prevention method involved the mixing of roasted and ground eggshells with the leaves and petals of marigold flowers, stirring this mixture with treacle into a pot of warmed ale, and drinking it twice a day. A similarly exotic remedy was to place a live hen near the swelling to draw out the disease and then drink a cup of your own urine twice a day.

Some effective treatments

The most successful measures taken to avoid the plague were those that involved forms of quarantine.

In fact, the word *quarantine* comes from the Italian for *forty days* — *quaranta giorni*. In Venice, ships suspected of being infected had to stay on an island next to the city for 40 days to ensure they weren't carrying the disease.

Islamic religious teachings encouraged people to not flee the plague, but to stay where they were to avoid infecting others. However, these methods did not completely stop the disease. For many people, simply fleeing an infected town or village was the best form of protection, although it was usually only the wealthy who could take advantage of this.

In the French city of Avignon, Pope Clement VI sat between two large fires designed to purify the air. The plague bacteria cannot survive intense heat, and fleas also dislike heat, so this method may well have been the most effective.

12.15.2 Religious responses

Followers of all religions saw the Black Death as divine punishment.

- Christians believed they were punished for sins; they turned to prayer and pilgrimages.
- In Mecca (in 1348) Muslims saw the plague as punishment for allowing non-believers into the holy city.

In some places, religious authorities and town councils imposed tight restrictions on people's behaviour in the hope of keeping the plague at bay. In the French city of Tournai, men and women who were living together but not married were ordered to marry or to separate, and gambling, swearing and working on the Sabbath (a day of religious observance) were banned.



SOURCE 4 This image depicts Saint Sebastian interceding for victims of the plague.



SOURCE 5 A mass grave was discovered in Gdansk, Poland, at the former site of a hospital. The sheer number of bodies meant that they could not be buried in the usual style.



Mass deaths and burials

So large was the death toll from the Black Death that all the usual religious rituals associated with death, such as confessing one's sins to a priest before death, could rarely be observed. As many as half the priests died from the plague and many others fled, making the situation worse. In 1348, Pope Clement VI decreed that those who were infected could make their confessions to each other, including to a woman, if no priest was available. Collection of corpses took place every night, with most buried in mass graves on the outskirts of the town. Very rarely was a proper funeral service held for those who had died.

Monks and monasteries

Throughout Catholic Europe, monasteries had become important centres of learning, and many had schools attached. The monks made an important contribution to the life of the surrounding community and were often the first ones that people would turn to in times of trouble. Because the monks saw it as their duty to tend to the sick, they quickly caught the disease and their numbers in the monasteries were reduced. In the period after the Black Death, many inexperienced and poorly trained monks moved into the monasteries, reducing their influence as places of learning.

The Flagellants

One religious group that responded very publicly to the spread of the plague was a group known as the Flagellants. They believed that whipping themselves with steel-tipped whips would show their willingness to be punished for their sins, and win God's favour. The Flagellants are believed to have originated in the eleventh century and had undertaken pilgrimages across Europe in the 1260s. The onset of the Black Death drew many new followers to their group, and they travelled from town to town across Europe, whipping themselves until they bled. In reality, they were probably helping to spread the disease. Many of them carried the disease in their blood, and they often brought the disease-carrying rats and fleas with them as they travelled.

SOURCE 6 A procession of Flagellants in the Netherlands in 1349



SkillBuilder discussion

Analysing

1. Look at **SOURCE 6**. What specific details in the image show that these people are performing acts of penance? Look carefully at their clothing, actions, and any objects they are carrying.
2. Flagellant processions often attracted large crowds of observers. What different reactions might medieval townspeople have had to seeing this procession pass through their streets?
3. This image was created in the Netherlands in 1349. How reliable do you think it is as evidence of what Flagellant processions actually looked like?

Did Islamic teachings help?

Although Islamic leaders encouraged their people to shelter in place and avoid spreading the plague, there was naturally a great deal of movement as people fled the plague or entered cities to seek new opportunities. There were not as many outward signs of penitence, like the Christian Flagellants, because Muslims were taught that dying of the plague made them a **martyr** and allowed them to immediately ascend to heaven.

Some practices, such as communal prayers, may have only helped to spread the plague quicker. Likewise, caring for the sick in their community was one of the key principles of Islamic faith. Unlike Christian communities who shunned the sick, they were often well-cared for in the Middle East, potentially leading to greater infection but also to a higher chance of recovery.

12.15 SkillBuilder activity ANALYSING

Jewish people have faced discrimination and persecution throughout history, often due to harmful stereotypes and unfounded prejudices. Despite contributing significantly to the societies they lived in, they were frequently treated with suspicion and wrongly blamed for societal problems. These attitudes were based on fear, ignorance and discrimination.

- Using the internet and a library, **investigate** the persecution of the Jewish people in medieval Europe, particular during the time of the Black Death. In particular, answer the following:
 - Explain** why Jewish people were treated as outsiders.
 - List** some examples of restrictions that were placed on Jewish people in different countries.
 - Name** at least one other incident when Jewish people were deliberately targeted for persecution.
- Construct** a mind-map of ways in which Jewish people were persecuted in the medieval period and who was discriminating against them. You might like to colour-code Christian and Muslim offenders and compare which of these groups was more tolerant of the Jewish people.

12.15 Exercise

learn on

Learning pathways

LEVEL 1

1, 4, 6, 8

LEVEL 2

2, 3, 5, 10

LEVEL 3

7, 9

REMEMBER AND UNDERSTAND

- Are the following statements true or false?
 - People used quarantine to avoid the plague.
 - Smelling fragrant spices and herbs was used to avoid the plague.
 - People fled plague-stricken areas to avoid the plague.
 - The blood from buboes was ingested to avoid contracting the plague.
- Identify** and **explain** three 'medical' treatments that were recommended for dealing with the plague.
- Explain** the purpose of the costume worn by doctors during the period of the Black Death.
- _____ sat between two fires designed to _____.
This probably kept him safe since _____ dislike heat.
- Use the information in **SOURCE 2** to **define** your own description of the buboes that were symptoms of the Black Death.

ANALYSE AND APPLY

- Examine SOURCE 3.** This action would have been dangerous for the doctor because:
 - the patient might react violently to being cut.
 - the doctor might accidentally kill the patient.
 - the cut could attract more rats, thus spreading more disease.
 - the infected blood might spread the disease.
- Infer** what **SOURCE 4** tells us about the importance of religion in medieval life.
 - Describe** how religious authorities responded to the threat of the plague.
- Refer to **SOURCE 6.** **Explain** what the Flagellants were hoping to achieve through their activities.

EVALUATE AND COMMUNICATE

- Normally, the Catholic Church allowed only priests to administer the last rites to a dying person. However, during the Black Death they allowed anyone to take final confession. **Evaluate** the effect this might have had on people's thoughts about the clergy.
- Compare** how the European and Middle Eastern responses to the Black Death differed.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the impacts of the Black Death on Europe in the Middle Ages
- **describe** the ways society changed in the Middle Ages as a result of the Black Death.

Tune in

Disaster has always had an impact on daily life, either from need (people filling in vacant roles, infrastructure change or new social practices) or from a desire from populations to avoid situations such as this again.

SOURCE 1 Ibn Khaldun, who lived through the plague, wrote about the changes that he observed in societies both Christian and Islamic.

Civilization both in the East and the West was visited by a destructive plague which devastated nations and caused populations to vanish. It swallowed up many of the good things of civilization and wiped them out. It overtook the dynasties at the time of their senility, when they had reached the limit of their duration. It lessened their power and curtailed their influence. It weakened their authority. Their situation approached the point of annihilation and dissolution. Civilization decreased with the decrease of mankind. Cities and buildings were laid waste, roads and way signs were obliterated, settlements and mansions became empty, and dynasties and tribes grew weak. The entire inhabited world changed. The East, it seems, was similarly visited, though in accordance with and in proportion to [the East's more affluent] civilization.

1. Read SOURCE 1. Identify the ways in which the lives of average people would have been affected.
2. This author is a Muslim from Tunisia — would a medieval monk have written in the same way about this crisis? Discuss.
3. How does Ibn Khaldun describe the impact of the plague on civilisations in both the East and the West, and what might this suggest about the social and political consequences of the Black Death in medieval times?

12.16.1 Social changes

Between 1347 and 1351, the Black Death had a brutal effect on life in Europe and the area surrounding the Mediterranean Sea. Despite all the devastation, there were also some positive changes in the following years, many of which occurred as a direct response to the horrors of the plague (see SOURCE 2).

Growth of medicine

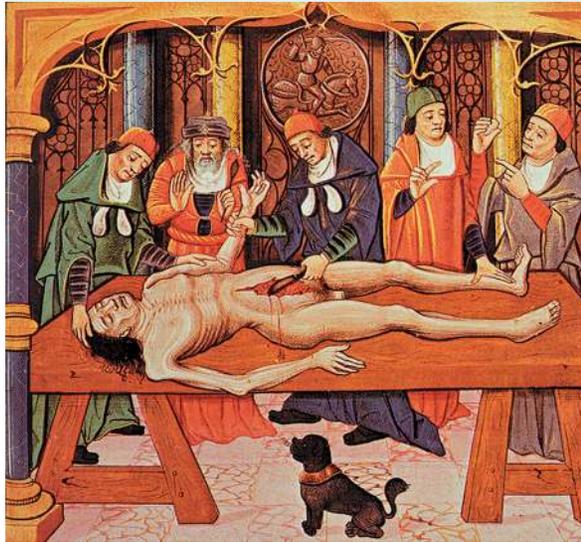
The failure of medieval medicine to treat plague victims led to changes in medicine after the Black Death. Before, hospitals just isolated sick people, expecting them not to survive. During the Black Death, doctors began trying to cure patients, and this continued afterward. Hospitals started working with universities and collecting medical books. More dissections of human bodies improved knowledge of anatomy and surgery.

Sanitation and public health

In a number of places, authorities became more aware of the need to take responsibility for the health of the population. In Italian cities such as Venice and Milan, public health boards were set up to deal with the plague, and these continued after the disease had moved on. These boards gradually gained extra powers and became a valuable means of preventing the spread of illness. In London, the city council brought in regulations to clean up the city. Laws to prevent littering, the employment of street sweepers and heavy fines for dumping waste in the river were all implemented in the years following the Black Death.



SOURCE 2 As shown in this fifteenth-century illustration, the desire of doctors to find out more about the human body led to an increase in dissections, which improved knowledge of human anatomy.



SkillBuilder discussion

Questioning and researching

1. What are the specific details in the image at **SOURCE 2** that give you information about what they are doing here? Look carefully at their clothing, actions, and any objects around them.
2. Prior to this change that allowed human dissections, the Church had banned it for religious reasons. Can you think of reasons that it was previously forbidden?

Religion

The devastation of the Black Death weakened the influence of the previously all-powerful Catholic Church. The inability of religious leaders to deal with the plague through prayer and the fact that so many priests had died of the disease led to many people losing some respect for the Church. In the 1360s and 1370s, English **theologian** John Wycliffe wrote a number of works critical of the papacy and of the role of monasteries in society. He gained a strong following among people whose recent experiences had led them to question the power and influence of the Church in society. Many of Wycliffe's followers were executed for heresy.

SOURCE 3 Muhammad ibn Sasra wrote about the changes he noted in his *Chronicle of Damascus*.

Men's occupations have ceased, the hearts of the rulers have become hardened, the rich have become haughty toward beggars, while the subjects perish and misfortunes increase.

Class changes

The huge decline in the numbers of peasants and agricultural workers meant there were fewer people left to perform their tasks. This meant that peasants were able to demand higher wages. However, these demands were often resisted by those in power. Peasants and workers in various parts of Europe rose up to demand their rights in the years following the Black Death. The social and economic elite were extremely worried about the desire of those beneath them to affect change in the social hierarchy, leading to laws such as King Edward III's *Statute of Labourers* in 1350. This essentially prohibited requesting or offering wages higher than those offered before the plague, creating a legal limit to force people to stay in their class.

SOURCE 4 The Jacquerie uprising in 1358 was an attempt by French workers to improve their conditions.



Did you know?

In some parts of Europe, monarchs and aristocrats were alarmed by the growth of the middle class and the increased wealth of some of the peasant class. They passed 'sumptuary laws', which regulated the type of clothing that peasants were allowed to wear. This was to prevent peasants from using their new-found wealth to begin dressing and behaving as if they were members of the upper classes.

In France in 1358, a group of workers called the Jacquerie rose up in revolt to try to improve their working conditions. In 1378 a group of workers in the wool industry, who were known as the *ciompi*, led a revolt in Florence, Italy, where they managed to force some democratic government reforms for a brief time. In England, causes of the Peasants' Revolt of 1381 can be directly traced to Edward III's attempt to control the poorer population.

Although most rebellions and revolts were put down, the overall trend of change was undeniable. A greater number of people engaged in skilled trades rather than the feudalistic working of allocated land, and people flocked to cities for new opportunities. This brought about the growth of a **middle class** and cemented the end of the feudal system. These things may have occurred without the Black Death's impact simply due to political unrest and the famines preceding it.

Language

In England, before the Black Death, most educated people spoke Latin or French. The death of large numbers of educated monks and other scholars meant that schools had to resort to English as the language of instruction. By the 1380s, poets such as Geoffrey Chaucer were publishing their works in what is now referred to as Middle English. Chaucer is considered by many to be the father of English literature.

12.16 SkillBuilder activity COMMUNICATING AND REFLECTING

The Black Death spread quickly through Medieval Europe and infected 30–60 per cent of the population.

1. **Discuss** the following with others:

- Do you think that the Black Death would have as great an impact today as it did in medieval times?
- How could people of the time have protected themselves better? Consider their understanding of disease and the resources available to them.

2. **Write** a brief summary of how the world is better prepared now to combat disease and infection.

Learning pathways

■ LEVEL 1

3, 4, 5

■ LEVEL 2

1, 2, 7, 8

■ LEVEL 3

6, 9, 10

REMEMBER AND UNDERSTAND

1. **Explain** how the experience of the Black Death changed the ways in which hospitals operated.
2. **Describe** an example of an action taken in London to improve sanitation and public health after the plague had moved on.
3. Many people began to lose respect for the Church after the Black Death because:
 - A. they thought priests had caused the Black Death.
 - B. the *ciompi* suggested that the church was doing a bad job.
 - C. language began to evolve.
 - D. the Church couldn't do anything to stop the plague.
4. Before the Black Death, the two languages used by scholars and educated monks in England were _____ and _____.
5. Identify the result of the decline in the number of peasant and agricultural workers following the Black Death.
 - A. There weren't enough farmers to grow food.
 - B. Knowledge of farming was lost.
 - C. The Peasants' Revolt of 1381.
 - D. The growth of the middle class.
6. **Outline** how the decline in the number of peasant and agricultural workers after the Black Death gave them the strength to challenge those in power.

ANALYSE AND APPLY

7. a. **Describe** what is happening in **SOURCE 2**.
b. **Identify** the differences in the way the activity in **SOURCE 2** is depicted compared with how it would be performed today.
8. a. **Describe** what appears to be happening in **SOURCE 4**.
b. **Explain** why this event took place.
c. **Recall** any places where similar uprisings took place.
9. a. **Explain** what we mean when we refer to a 'middle class' in medieval society.
b. **State** four examples of occupations that you think would have been carried out by middle class people during the Late Middle Ages.
10. The *ciompi* in Italy managed to gain some 'democratic' reforms in the government of their city. **Identify** an example of what you think might be a 'democratic' reform.

Answers and sample responses for this topic are available online.

From Medieval times to the Early Modern World

LEARNING INTENTION

By the end of this lesson, you should be able to:

- **explain** how economic changes transformed the medieval world
- **describe** how town and city growth shaped modernity
- **discuss** how trade expansion drove the shift to the modern world.

Tune in

In **SOURCE 1**, the writer questions how we should understand the causes of major changes from 1500 to 1650.

SOURCE 1 From Roland H. Bainton, *The Age of the Reformation*, New York, 1956, p. 4

The Age of the Reformation was an age of upheaval. With regard to every such era dispute arises as to whether events precipitated ideas or ideas incited events. Undoubtedly travel, discovery, invention and the consolidation of power prompted reflection about institutions and about the ultimate problems of life.

1. What does the author suggest about whether events caused changes in ideas, or if ideas caused events?
2. Can you think of a modern example where we wonder if events shape ideas or if ideas drive events?

12.17.1 Economic changes

The period 1500–1650 is often described as a time of transition from the medieval system of **feudalism** to the modern system of **capitalism**. In feudalism, **vassals** held land in return for services to their **lords**, who were supposed to provide them with protection. Capitalism is the modern economic system in which production and trade are privately owned for profit.

In the early 1300s, wars, the Black Death and the **Little Ice Age** reduced Europe's population, causing famine. After 1350, the number of towns grew again and some towns and cities grew wealthy and powerful.

For most people, life from 1500 to 1650 seemed unchanged, though few people could have been aware that the changes that were happening would have such enormous consequences. Many changes began in Europe. Discovering new lands, like the Americas, sparked a **Commercial Revolution** led by Portugal. By the mid-sixteenth century, Portugal had trading posts in Africa, the East Indies, India and Brazil. Spain followed, claiming much of the **New World**.

The Price Revolution

Merchants benefited most from the Commercial Revolution. They improved transport, trade and finance, making businesses more efficient with support from rulers. Merchants in Germany formed *hanses* (guilds), and a network of these guilds called the Hanseatic League dominated trade in Germany, northern Russia and Scandinavia.

As merchants became wealthy, the poor grew poorer. From the late fifteenth century, Spain and Portugal imported large amounts of silver and gold from the Americas, driving Europe's Price Revolution. These exports caused the value of precious metals to fall, which caused inflation. At the same time, between

1460 and 1620, Europe's population rose, increasing demand for goods and food. Big landowners benefited, while the poor struggled with hunger due to rising prices.



SOURCE 2 Trade, merchants and money changers, a c. 1539 woodcut by Joss Amman. During this time, hundreds of publications on business bookkeeping were sold.



SkillBuilder discussion

Analysing

1. How does Joss Amman's woodcut (**SOURCE 2**) illustrate the economic activities and social roles of 1500–1650?
2. What can you infer about the importance of bookkeeping and business practices from **SOURCE 2**?
3. How do the roles of merchants and money changers in **SOURCE 2** reflect the broader economic changes in Europe during this period?

12.17.2 Social classes

By 1500 CE, several social classes in Europe were unhappy with economic changes:

- **Townspople** who succeeded in business gained power. **Patricians** (three per cent of the population) controlled economies and lived like **nobles**.
- **Craftsmen** (90 per cent of towns) included guild masters, journeymen and traders. They often revolted when guilds lost control of trade.
- **Day labourers** and servants were poor and suffered due to the Price Revolution.
- **Peasants** remained poor but were becoming literate and interested in reform. Wealthy townspeople invested in agriculture, and rulers imposed new taxes, sparking peasant revolts.
- The feudal aristocracy (nobles) lost importance but held onto medieval privileges. **Knights** became army officers or **robber barons**.
- The higher clergy grew richer, causing resentment, while the lower clergy stayed poor.

12.17 SkillBuilder activity

QUESTIONING AND RESEARCHING

Identify the origin, content, context and purpose of primary and secondary sources by examining **SOURCE 3**.



SOURCE 3 From Harold J. Grimm, *The Reformation Era 1500–1650*

... a new attitude toward economic matters manifested itself among businessmen which may be called the 'capitalist spirit'. Since money was no longer loaned primarily to assist those who were in need, but also loaned for profit, the Biblical [restrictions] ... and other restrictions upon usury were ... ignored. The new spirit began to touch nearly every phase of European life. Feudal services and dues were commuted to money payments; agricultural production came to be looked at as a means of making profit; merchants and even some nobles invested accumulated surpluses in commercial and industrial enterprises; entrepreneurs began to own raw materials, warehouses and the means of production; labor was hired as a means of creating new wealth; territorial rulers sought to increase the decline of the medieval economy ... and its many regulations designed to give people 'a fair living' and goods sold at 'a just price', and with the greater opportunities to make money their power by tapping all available sources of income; and even church offices and means of grace were frequently viewed in terms of financial returns. ... The older chivalric virtues of honor and personal loyalty were gradually supplanted by the middle-class virtues of honesty, industry and integrity; and the medieval sense of corporate responsibility gave way to an emphasis upon individual initiative.

Source: Harold J. Grimm, *The Reformation Era 1500–1650*, Macmillan, New York, 1965, p. 12.

1. **Identify** what Grimm calls the new attitude of businessmen towards economic matters.
2. **Explain** what you think he means by 'the capitalist spirit'.
3. **Describe** what changed in investment in agriculture and industrial production.
4. **Analyse** how personal virtues were changing.

12.17 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 3, 4

■ LEVEL 2

5, 6, 8

■ LEVEL 3

7, 9, 10

REMEMBER AND UNDERSTAND

1. Identify when populations began to recover from the losses caused by plagues, famines and wars.
 - A. Mid-thirteenth century
 - B. Early twelfth century
 - C. Eighteenth century
 - D. Mid-fourteenth century
2. Where did the Hanseatic League dominate trade?
 - A. Britain, Germany and Italy
 - B. Germany, northern Russia and Scandinavia
 - C. Portugal, northern Russia and Spain
 - D. India, Scandinavia and Germany
3. **Complete** the sentence: Merchants improved transport by _____ and _____. They improved commerce and were assisted by rulers of _____, _____ and _____.
4. **Identify** the parts of the world where Portugal had trading posts by the mid-sixteenth century.

ANALYSE AND APPLY

5. **Explain** why the medieval craft guilds opposed changes in trade.
6. **Identify** three social classes who had reasons to resent the economic changes that were taking place.
7. **Describe** the scene in **SOURCE 2**.
8. **Explain** what evidence **SOURCE 2** provides for a changing economic system, in which bookkeeping and money changing had become more important.

EVALUATE AND COMMUNICATE

9. **Examine SOURCE 3.** *Usury* means making people pay interest on borrowed money. It was considered sinful by Christians in the Middle Ages. **Discuss** what this source suggests about changes in attitudes to usury and to making profits?
10. **Suggest** why a changed attitude to usury and profit-making would have been essential for a modern capitalist system to emerge.

Answers and sample responses for this topic are available online.

LESSON 12.18 The Scientific Revolution and other changes

LEARNING INTENTION

By the end of this lesson, you should be able to:

- **explain** the importance of the Scientific Revolution, the scientific theories and discoveries
- **describe** key cultural and intellectual changes of the early modern world.

Tune in

When Marco Polo, an Italian merchant and explorer, visited China in the thirteenth century, he was amazed by its wealth and culture. Nothing in Europe compared to it.

At that time, no one could imagine that western Europeans would colonise new unknown continents in the next few centuries, or how Europe would dominate the world.

Discuss what could have caused such a big change.

SOURCE 1 An artist's impression of Marco Polo being welcomed to the court of Kublai Khan



12.18.1 Who were the great scientific thinkers?

During this time, religion, arts and science were connected. A scholar could be a priest, scientist, artist and inventor. The Renaissance brought about a Scientific Revolution, encouraging people to challenge traditional beliefs and authority by using observation and reason. Table 1 shows some of the most famous thinkers of the time.

SkillBuilder discussion

Evaluating

1. What significant discoveries might Copernicus have made while observing the night sky with his telescope?
2. In what ways did Copernicus's observations influence other scientific thinkers of the age, and what impact did this have on the development of modern science?



SOURCE 2 Copernicus observing the night sky with his telescope

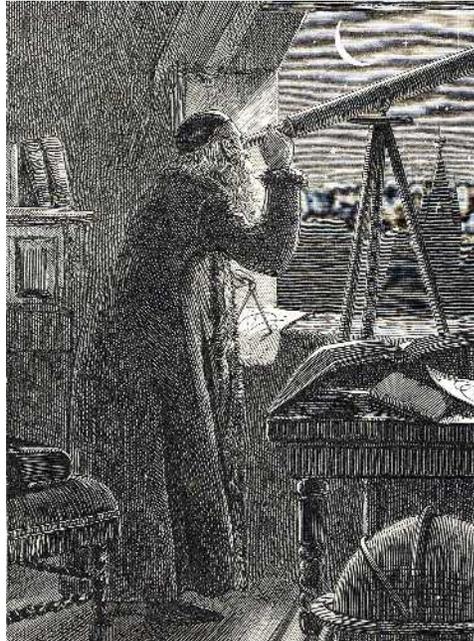


TABLE 1 Some of the well-known scientific thinkers of the age

Name	Years	Field	Contributions
Leonardo da Vinci	1452–1519	Art, biology, anatomy, geology, engineering, maths, music	Produced iconic paintings such as the 'Mona Lisa', drew detailed anatomical drawings of the human body, designed a flying machine, a helicopter and a parachute.
Nicolaus Copernicus	1473–1543	Astronomy	Developed the theory that Earth revolves around the Sun, published in 1543
Andreas Vesalius	1514–1564	Anatomy	Published book on human body in 1543, a major advance in the study of anatomy. Defied the Church to conduct dissections using bodies of people who had been executed.
Giordano Bruno	1548–1600	Astronomy	Recognised Sun as one of many stars, expanded on Copernicus's ideas
Galileo Galilei	1564–1642	Astronomy	Developed the telescope, proved Copernicus's theory, published findings in 1632
Girolamo Fracastoro	1478–1555	Medicine	Discovered that diseases spread through germs
Miguel Servet	1511–1553	Medicine	First in Europe to describe blood circulation
Johannes Kepler	1571–1630	Astronomy	Known for laws of planetary motion, helped Newton develop his theory of gravity
Isaac Newton	1643–1727	Physics	Famous for laws of motion and discovery of gravity

12.18.2 The dangers faced by scientific thinkers

In medieval Europe, religion controlled all aspects of life and explained the world. Challenging religious ideas could be dangerous at this time, but the Church often supported scientific advances. However, it punished **heresy**.

- Giordano Bruno was burned at the stake in 1600.
- Galileo was arrested in 1633, forced to publicly renounce his scientific theories, and spent the rest of his life under house arrest.
- Miguel Servet was persecuted by both Catholics and Protestants and burned at the stake.

Ultimately, the Scientific Revolution weakened powerful institutions. While movable type printing was used first in China, Johannes Gutenberg (1398–1468) developed the first European printing press between 1440 and 1452 in Germany. Before this, books were copied by hand or printed from wooden blocks, which was time-consuming and expensive.

Gutenberg's press used movable metal type, enabling mass book production and widespread circulation of ideas. Books were printed in Latin and various European languages. The first book produced was the Gutenberg Bible, completed in 1456.

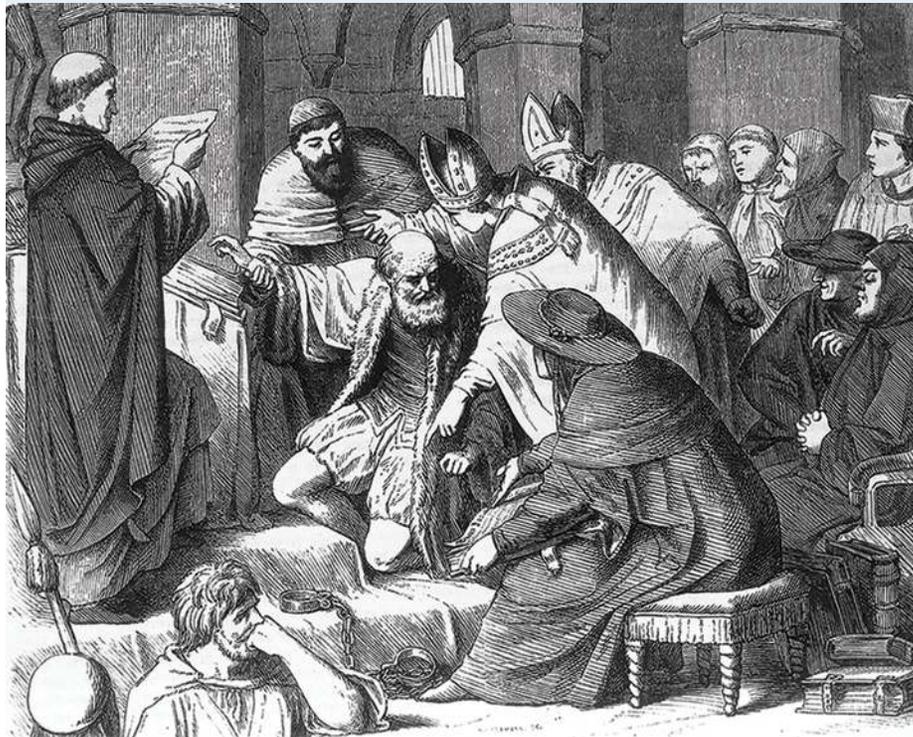
The printing press spread ideas widely, breaking the societies' earlier reliance on small groups (such as Church and clergy) for knowledge. With the Bible printed in various languages, people could read it independently, which started a new era of learning.

SkillBuilder discussion

Analysing

1. Identify the key events in the image of Galileo facing the Inquisition.
2. Explain why Galileo's scientific ideas conflicted with the Church.
3. Discuss the significance of the individuals around Galileo in the context of changes in scientific thought.

SOURCE 3 Galileo Galilei facing the Roman Catholic Inquisition, 1633



12.18.3 The Enlightenment and the Renaissance

The Renaissance (meaning rebirth of classical ideas and thinking) and the Enlightenment (referring to intellectual and philosophical growth) were periods of remarkable change in Europe. The Renaissance, meaning rebirth, brought renewed interest in classical ideas and thinking. This era saw the combination of ancient texts and innovative ideas, leading to significant cultural changes.

During the Renaissance, people began to question established beliefs, especially in religion and politics. Humanism emerged, emphasising the value and dignity of humans and the importance of reason and inquiry. Writers of the time felt that art and literature were moving in a new direction.

Historians argue that Renaissance ideas evolved from medieval trends. Contact with other societies introduced fresh ideas to Europe. The Crusades brought exotic goods and preserved classical texts from Byzantine and Arab civilisations. Medieval universities like Bologna (1088), Oxford (1096), and Cambridge (1209) continued studying ancient texts. Many key figures of the Renaissance studied at these universities.

SOURCE 4 An illustration from a medieval manuscript depicting the Three Graces (goddesses from Greek and Roman myths)



These discoveries led people to question life before the 'Age of Reason'. For the first time, the Church's authority, the power of kings and old beliefs were challenged. In response, those in power used harsh methods to maintain control.

12.18 SkillBuilder activity **ANALYSING**

1. **Describe** how Copernicus studied the skies and proposed that the Earth orbits the Sun in **SOURCE 2**.
2. **Explain** how his theory contradicted the Catholic Church, which claimed the Earth was the universe's centre.
3. **Determine** how Bruno's claim about the Sun and Galileo's confirmation of Copernicus's theory advanced our understanding of the universe.

Learning pathways

■ LEVEL 1

1, 2, 3, 4, 6

■ LEVEL 2

5, 7, 6

■ LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

1. Andreas Vesalius studied dead bodies without breaking the Catholic Church's rules. True or false?
2. Leonardo da Vinci worked in many different sciences. True or false?
3. Fill in the blanks: Nicolaus Copernicus, a Polish _____, theorised that the Earth revolved around _____, challenging the Church's belief that _____ was at the centre. Galileo Galilei used a _____ to prove Copernicus was right. Giordano Bruno expanded on this, realising the Sun was just one of many stars.

ANALYSE AND APPLY

4. **Explain** what new attitudes came from the Scientific Revolution and the Enlightenment.
5. **Explain** how the Catholic Church felt about the new ideas that came from the Scientific Revolution and the Enlightenment.
6. **Outline** how Vesalius studied human bodies despite the Church's rules.
7. Look at **SOURCE 3**.
 - a. **Explain** what is happening in this source.
 - b. **Explain** why Galileo is on trial.
8. Miguel Servet was executed for his religious beliefs, not his science. **Suggest** why he was killed so brutally.

EVALUATE AND COMMUNICATE

9. **Explain** the different views of **Galileo** and his persecutors.
10. **Discuss** how science and religion were connected in the Early Modern Period and how this made it dangerous for scientists.

Answers and sample responses for this topic are available online.

LESSON 12.19 Inquiry: How does an event impact different societies?

LEARNING INTENTION

By the end of this lesson you should be able to **compare** the effects of the Black Death on two different societies and use historical sources to build an effective discussion of the past.

Background

The Black Death was a plague pandemic that affected Asia, Europe and North Africa in the fourteenth century. The disease infected almost everyone who came into contact with it and resulted in a huge death toll and social, cultural and economic upheaval. During this period, the East and West were directly connected by not just trade, but also pilgrimage and conflict.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

In order to truly understand how different cultures approached containing and managing the Black Death, you need to have a grounded place to examine. Use the list below or pick from the **SOURCE 3** map in lesson 12.16 to find two cities which, when compared, will give you an idea of how the local population reacted.

West	East or Near East
London	Constantinople
Florence	Cairo
Paris	Alexandria

Step 2: Analysing

Use the information in this topic and do some additional **research**. What was the reaction to the plague in the cities or their surrounding regions? Did religion play a part? Did locals listen to the guidance of their leaders?

Primary sources are a great way to get an insight, but secondary sources have normally brought together all the information you'll need into one place. Try to get a mixture of both.

Step 3: Evaluating

Compare the reactions to the Black Death in one city to another in a visual way. This could mean

- a Venn diagram
- a mind-map
- comparative population/death toll graphs.

Step 4: Communicating and reflecting

Create a response to the topic, *Which culture or region responded the most effectively to the Black Death crisis?*

This could be tackled in several ways:

- write a short response exploring your opinion
- create a comprehensive infographic showing the different approaches
- record a vlog discussing the positives and negatives of each approach.

Whatever mode you choose to apply to this task, you must use your research and the historical sources you have gathered to support your contention.

12.20.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

12.2 How do we know about medieval Europe?

- Much of what we know about medieval Europe is from different types of evidence that provide us with information.
- Sources from medieval Europe include artwork, written sources and artefacts, monuments and buildings.

12.3 The key features of the feudal system

- Feudalism, a method of ordering society, was expanded and developed over the period that Charlemagne ruled in Europe.
- The system was based on the monarch giving land to the wealthier nobles and lords in return for their loyalty and taxes.
- With the land, the nobles and lords gained power over the peasants who lived and worked there, which gave them an income.
- Below the nobles were the knights, who were their sub-tenants. In return for land, they gave loyalty to the lord, fought for him and paid tax they earned from their peasants.
- The feudal system was an effective way to maintain social order.
- Towards the end of the Middle Ages things began to change in relation to the feudal system, as the towns and cities grew.

12.4 Life for people in the feudal system

- Quality of life in the Middle Ages depended largely on what position a person held in the feudal system. The nobility, knights and barons all lived reasonably comfortable lives with privileges. The clergy generally led simple and scholarly lives. Peasants, though, had few rights and life was very hard.
- Men did all the farm work, which was mainly physical labour.
- Most peasants had no formal education.
- Women, even those of higher classes, had few rights. Their purpose was to provide children. Most peasant women also did farm labour work such as food preparation, looking after livestock and weaving.
- Children were also regarded as sources of labour as soon as they were old enough to help.

12.5 Medieval castles

- In medieval times, castles were built to protect the monarch's or lord's lands, also for them to live in.
- Early castles were of motte-and-bailey design: a keep built on a high mound, surrounded by a ditch or moat. The high position gave the people in the keep the advantage when they were being attacked.
- During the Middle Ages castle designs became more and more sophisticated, with heavy concentric walls, battlements and drawbridges.
- Within the castle there were troop quarters, stables, armouries, living quarters, kitchens and dining halls.
- By the end of the Middle Ages, feudalism was declining, castles were no longer effective as a show of strength, and weaponry had developed, so that older weapons were less effective.

12.6 Warfare in the Middle Ages

- Medieval warfare was a clash of arms for power and wealth.
- Armies would fight hand-to-hand in tightly grouped formation, using weapons such as swords, pikes, axes and maces.
- Archers with crossbows and longbows would also be used and mounted knights would try to break up the enemy's formations.
- Missiles were used to try to break the walls of a town or castle, with trebuchets and early cannons hurling rocks and other materials at the enemy.
- Two important developments in the Middle Ages that allowed for the appearance of the mounted warrior (knight) in battle were the stirrup and a heavier breed of horse that could carry a man in full armour.
- Knights tended to be wealthy, because it was expensive to breed warhorses and own good armour.
- Over the few hundred years that knighthood was at its peak, the armour developed from chain mail to whole suits of armour. Weapons were heavy iron swords, maces, battle axes and lances.

12.7 The growth of towns

- As trade routes became more established and Europe became more peaceful, towns grew, giving rise to a new social group, the merchants.
- Merchants travelled to distant markets in Asia, the Middle East and Africa, and returned with goods and ideas to be exchanged.
- The new merchant class became quite powerful.
- As the demand for skilled workers grew, young people were trained in particular trades in apprenticeships.
- The standard of work by tradesmen was overseen by a guild, which was an association formed to protect the trade's own interests. The merchant guilds became quite powerful, controlling trading ports and routes for themselves.

12.8 Crime and punishment in medieval times

- As there was no police force to protect communities in medieval Europe, most people had to take on that responsibility for their communities. In order to dispense justice, lords relied on volunteer constables and watchmen.
- An accusation of disturbing the peace was a serious crime in medieval times. Punishments usually took the form of being out in stocks or the pillory. Villagers or townsfolk would be encouraged to shame the offender.
- Trials by jury were commonplace and all villagers had to attend several times a year. The lord's steward oversaw the court and 12 village men made up the jury. The jury would decide upon the fate of the accused.
- The Church was the most powerful institution in medieval Europe and had considerable control over the population. Serious crimes, such as blasphemy and heresy, were punished swiftly by the Church.
- Treason was an especially serious crime in medieval Europe. Plotting against the monarch, conspiring with foreigners and leading a rebellion are some key examples of treason. To maintain power, monarchs had to punish their enemies, as well as warn potential enemies against treasonous acts. Punishments were severe, yet the public was encouraged to attend the executions.

12.9 The power and authority of the Church

- The Roman Catholic Church was the one common institution found across western Europe and everyone was expected to live by Church law and keep its rituals and customs.
- As God's representative on Earth, the Pope was a very powerful figure who ruled with the upper class of clergy: cardinals, archbishops and bishops.
- The lower clergy took the Pope's messages to the people in the villages through their sermons.
- Every village had a parish church built with peasant labour, which was the centre of their community. The more powerful churches, the seats of the bishops, were called cathedrals.

- By early medieval times, communities of religious men (monks) were living in monasteries. These religious men devoted their lives to God and played important roles in the local communities, such as running schools and hospitals.

12.10 The power of the written word

- Parish priests, monks, nuns and friars played an important role in spreading Christianity to even the most remote village.
- Monks lived in small closed communities called monasteries and nuns lived in similar communities called convents.
- The religious orders such as monks produced the written texts by hand in a very labour-intensive process.
- Manuscripts were produced by hand. They were made from vellum and written on with quills.
- Illuminations are the elaborate illustrations that accompanied the manuscripts.

12.11 Inquiry: The *Magna Carta*

- The *Magna Carta* is a royal charter of rights that was signed by King John of England and his barons in 1215.
- It was designed to bring peace between King John and his barons by ensuring that the monarchs of England were bound by the law and could not just make their own laws.
- It had a significant impact on a number of different groups in society.

12.12 The changing relations between Islam, Christianity and Judaism

- Many people during the Middle Ages were illiterate and therefore relied on priests for education and guidance.
- In Medieval Europe, medicine took second place to religion. Priests were considered more important than doctors.
- Most people believed that prayer was the most effective way of dealing with serious illness.

12.13 The Black Death

- The Black Death was a disease that devastated Europe, Asia and North Africa during the fourteenth century, particularly between 1347 and 1351.
- The Black Death was a combination of three related diseases — bubonic plague, pulmonary/pneumonic plague and septicaemic plague.
- A bacterium known by the scientific name of *Yersinia pestis* was the cause of the Black Death. These bacteria were transmitted by a number of different types of flea found living on the bodies of black rats.

12.14 How did plague spread?

- The growth of trade played an important part in the spread of disease. The Black Death was more easily able to spread between settlements along trade routes such as the Silk Road.
- It is believed that the Black Death first appeared in its deadly form in China and that it was carried there by the Mongols.
- The potential was always there for the Black Death to be carried to Europe, either by European traders returning from the east or by the Central Asian Tartar warriors (Mongols), who were continuing their attacks in eastern Europe.

12.15 Responses to the Black Death

- Medieval doctors had no idea what had caused the Black Death and they resorted to the traditional, unsuccessful methods of treating illness.
- Some people believed that the disease came from miasma (unpleasant smells or fumes), while others saw it as a punishment from God.

12.16 How did the Black Death change society?

- Following the Black Death and the failure of medieval medicine to treat the sick, there was a greater focus on medical research. An increased emphasis on medical knowledge led to more dissections of human corpses and improvements in surgical practices.
- The Black Death weakened the Catholic Church — many people lost faith and respect after so many people, including priests, had died from the plague.
- The death of so many educated monks and scholars meant that schools had to teach in English rather than Latin or French.

12.17 From Medieval times to the Early Modern World

- This was a time of transition from feudalism to capitalism.
- The Price Revolution brought wealth to some and poverty to others.
- Many social classes, like craftspeople and peasants, were unhappy.
- Rulers replaced knights with standing armies and mercenaries.

12.18 The Scientific Revolution and other changes

- It was dangerous to challenge Catholic Church beliefs.
- Some scientists were silenced or killed by the Church or Calvinists.
- The Scientific Revolution led to the Enlightenment.
- There were intellectual and cultural changes from Medieval times to the Early Modern World.

12.19 Inquiry: How does an event impact different societies?

- Different societies reacted to the Black Death in different ways.
- When researching a topic, a mix of primary and secondary sources is ideal.

12.20.2 Key terms

archbishop head bishop

artillery large mounted firearms such as the cannon

bishop clergyman who governs a diocese, a large church district

blasphemy any words or actions that were considered disrespectful or insulting towards God or religion.

This included things like cursing, speaking rudely about religious figures or religion, or denying the existence of God. It was considered a serious crime and was punished by fines, imprisonment, or even death.

bloodletting medieval medical practice where blood was deliberately removed using cuts or leeches; commonly used during plagues though it was often harmful

bubonic plague the commonest form of plague in humans, characterised by fever, delirium, and the formation of buboes

capitalism economic system in which the means of production, distribution and exchange are privately owned

capitalist spirit the attitude of working hard, taking risks, and investing to make a profit in a free-market economy

cardinal leading clergyman who is a member of the Pope's Council, or Sacred College, and who has the power to elect the Pope from among his own group

cathedral main church of a diocese; contains the bishop's throne

chronicle a record of events as they happened, usually written by a person who was present at the time

city-state a city that with its surrounding territory forms an independent state

clergy officials of the Church

Commercial Revolution a time in history when trade and business grew quickly across Europe, leading to new ways of buying, selling and making money that helped shape the modern economy

concentric having a common centre

craftsmen skilled workers who make things by hand, often using traditional methods

curtain wall outer wall surrounding an inner wall in a castle

day labourer a person who worked for daily wages, often doing hard physical jobs like farming or construction, without long-term employment or job security

dormant inactive or sleeping, with the potential to become active at any time

duke in England, a lord whose status placed him just below that of a prince; elsewhere in Europe, a ruler of a small state called a duchy or dukedom

endemic normally and regularly found in a particular location or environment

fallow when a field was left for a period without being sown in order to restore its fertility through the nutrients in the soil

feudalism social order in medieval Europe

fief a gift, usually land, given by a lord to a vassal (or tenant) in exchange for loyalty and service

Franks people of a group of a Germanic nation who ruled in western Europe from the sixth century CE

geld a form of land tax

guild an association of people engaged in a particular trade or craft for the mutual benefit of its members

heresy opinion that challenged or differed from that of the Roman Catholic Church or the less tolerant Protestant churches

heretic one who rejects the teachings of the Church

illumination hand-painted illustration in a medieval book

keep innermost tower of a castle

knight a warrior from the Middle Ages who wore armor, rode a horse, and promised to protect others and follow a code of honour called chivalry

lance a long wooden shaft with a steel point used as a weapon by mounted knights

Little Ice Age when the weather in Europe and other parts of the world became much colder than usual, causing problems like poor harvests, food shortages, and harsher living conditions.

lords feudal term for aristocracy of big landowners

lymph node lump of tissue that helps the body fight infection; part of the immune system

mace iron-headed club

martyr someone who dies for their faith or is recognised by their religion in death

Mass Roman Catholic Church service

miasma unpleasant smells or fumes thought to be the cause of disease in medieval times

middle class the social group between the wealthy upper class and the working class (or the privileged nobility and peasants). During the Industrial Revolution, this included merchants, shopkeepers, doctors, lawyers, and other professionals.

moat water-filled defensive ditch surrounding a castle

motte a mound upon which a castle was built

New World a term for the Americas during Early Modern Times

nobles the aristocracy; hereditary privileged class

Normandy now a French province, in the Middle Ages it was a dukedom in northern France

nun member of a closed community of women living under religious vows and rules

palisade tall fence made of pointed timber stakes driven into the ground

pandemic widespread across a large region

patrician a wealthy and powerful person in ancient Rome who belonged to the highest social class and often helped make important decisions in government

peasant a poor farmer who lived in the countryside and worked the land, often for a lord, with little money or power and few rights

persecution oppression or punishment of a person or group of people, usually because of their religion

phalanx body of foot soldiers in close battle order

pike long spear-like weapon carried by foot soldiers

pneumonic plague a severe lung infection caused by the bacterium *Yersinia pestis*

reeve a magistrate administering law in a village

regurgitate to vomit, or bring up the contents of the stomach or throat

robber baron a powerful and wealthy businessperson in the past who made a lot of money, often unfairly, by taking advantage of workers, customers or laws to grow their companies

sacrament a sacred Christian ceremony, for example, baptism or marriage

sanctuary protection offered to individuals who were seeking refuge from persecution or punishment. The right of sanctuary was based on the idea that churches and other religious institutions were sacred and provided a safe place for those in need of protection. They were granted temporary protection from arrest, allowing them time to negotiate a settlement for their crime, or seek a pardon.

septicaemic plague a plague wherein bacteria multiply in the blood

sermon moral or religious lecture delivered by a priest

stirrup foot supports suspended from a saddle by straps

thatch straw used for making roofs

theologian a person who is considered to be an expert in religious matters

townspeople people who lived and worked in a town, often involved in trades, crafts or business, and played an important role in the town's economy and daily life

vassal a person who holds land for a lord, and in return pledges loyalty and service to him

12.20.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry questions posed in the Overview:

What were the significant features of life in Medieval Europe?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

learn on



Post-test

Online post-test



eWorkbook

Customisable worksheets for this topic
Reflection



Digital document

Key terms glossary

12.20 Review exercise

Learning pathways

■ LEVEL 1

1, 2, 4, 7, 11

■ LEVEL 2

3, 5, 9, 10, 12, 14

■ LEVEL 3

6, 8, 13, 15

REMEMBER AND UNDERSTAND

1. Which of the following was not a weapon used by knights?
 - A. Mace
 - B. Lance
 - C. Cannon
 - D. Sword
2. Which of the Roman Catholic clergy was the most powerful?
 - A. Cardinal
 - B. Priest
 - C. Bishop
 - D. Monk
3. The main work of early Christian missionaries was to:
 - A. persecute non-Christians
 - B. spread the word of Christianity
 - C. eliminate the snakes in Ireland
 - D. travel across Europe to primitive tribes.



4. Where did the plague most likely originate?
 - A. Australia
 - B. Asia
 - C. Europe
 - D. Africa
5. The word 'quarantine' comes from which Italian phrase?
 - A. Separated patients
 - B. Forty days
 - C. God's will
 - D. It wasn't an Italian phrase — it originated in Spain
6. What is the name of the bacterium considered responsible for the Black Death pandemic?
 - A. *Yersinia pestis*
 - B. *Bacillus anthracis*
 - C. *Bacterium yersinius*
 - D. None of the above
7. What is an illumination?
 - A. A light in the altar of a church
 - B. An illustration in a holy manuscript
 - C. A new idea
 - D. A stained-glass window
8. Which of the following was not a social group in the feudal system in medieval Europe?
 - A. Clergy
 - B. Lords
 - C. Peasants
 - D. Pagans
9. Which of the following statements *does not* describe why historians once called the medieval period 'the Dark Ages'?
 - A. They believed that ignorance triumphed over learning and order.
 - B. There was a long period of coldness and darkness, causing famine.
 - C. It was a period of great instability.
 - D. Many Roman architectural structures were destroyed or abandoned.
10. Which of the following was not a defence feature of a medieval castle?
 - A. Brewery
 - B. Moat
 - C. Palisades
 - D. Bailey

ANALYSE AND APPLY

11. **Explain** the main reason for the spread of the Black Death.
12. **Describe** the main social groups in the feudal system.
13. **Discuss** the importance of the peasant class in supporting the feudal system.
14. a. **State** the purpose of castles.
 b. **Identify** at least two defence features of castles and **explain** how they worked against enemies.

EVALUATE AND COMMUNICATE

15. How did the practices and beliefs of the Church influence medieval medicine, particularly during and after the Black Death? Provide at least two specific examples.

Answers and sample responses for this topic are available online.

13 The Industrial Revolution

LESSON SEQUENCE

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LESSON 13.1 Overview

INQUIRY QUESTION

What were the significant social, economic, environmental and technological causes of the Industrial Revolution?

Throughout history there have been many important revolutions with wide ranging repercussions, but they were political revolutions. They changed the way a country was managed or which group of people held power. However, they did not fundamentally change the way people generated power or earned an income, or made goods or transported those goods. For those things to change more would be required than a change of leader. It would require the perfect combination of new technologies, access to fuel, access to raw materials and a growing population. It needed supply and demand. It needed a different sort of revolution, one that would impact people at all levels of society. It needed an industrial revolution.

learn on



Pre-test

Online pre-test



eWorkbook

Customisable worksheets for this topic



Digital document

Key terms glossary



Video eLesson

The Industrial Revolution



1694
The Bank of England is established.

1707
The first turnpike trusts are established.

1709
Abraham Darby develops a blast furnace capable of producing high-quality iron.



1757
The Sankey Canal is opened.

1761
The Bridgewater Canal is opened.

1763
Victory in the Seven Years' War gives Britain increased trade access to colonies in India and North America.

1680

1700

1720

1740

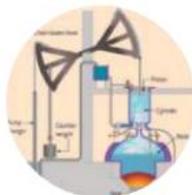
1760

1780

BCE

1700 onwards
Improvements in agricultural technology contribute to the agricultural revolution.

1712
Thomas Newcomen develops the 'atmospheric engine', the first practical steam engine.



1730s–1780s
The invention of new and larger spinning and weaving machines shifts textile industry into factories.



SkillBuilder

Use the SkillBuilder activities to develop these HASS skills:

- QUESTIONING AND RESEARCHING
- ANALYSING
- EVALUATING
- COMMUNICATING AND REFLECTING

1769
James Watt invents a steam engine capable of providing continuous power.

1783
Henry Cort's 'puddling' process further improves the quality of iron products.

1813
The first working steam locomotive, known as *Puffing Billy*, is built.



1830
Stephenson's *Rocket* hauls the first train on the Manchester to Liverpool railway line.

1842
Samuel Morse develops the single wire telegraph.



1800

1785
The Boulton and Watt steam engine is first used in a textiles factory.

1801
The first official population census is held in Britain.

1820

1825
The first English public steam railway (from Stockton to Darlington) is opened.

1840

1830s
Railway building begins in France and Germany.

1860

1851
The Great Exhibition is held in London.



1880

1876
Alexander Graham Bell patents the first telephone.

CE

How do we know about the Industrial Revolution?

LEARNING INTENTION

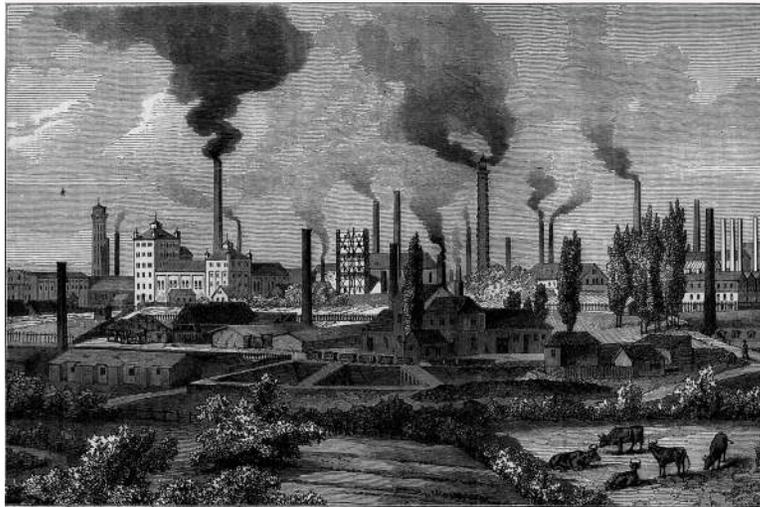
By the end of this lesson you should be able to **describe** the variety of sources that can be used by historians to understand the period of Industrial Revolution.



Tune in

The great technological changes that took place in Britain during the eighteenth and nineteenth centuries completely reshaped the way in which food, clothing and other necessities were produced. New materials and sources of power, along with new forms of transport, transformed a society that had not changed dramatically since the Middle Ages. This transformation is the source of many of the features of our way of life today.

SOURCE 1 Contemporary writers commented on life in the rapidly growing cities, and artists used their talents to depict the growth of factory production located in large towns.



1. What changes can you see in the image that might be due to the Industrial Revolution?
2. Suggest what impacts those changes might have had on society.

13.2.1 Why industrial 'revolution'?

The term *Industrial Revolution* was popularised by English historian Arnold Toynbee in the late 1870s and early 1880s. He and other historians noticed how quickly and drastically English society had changed in just over a hundred years. These changes were considered 'revolutionary' because they altered how people lived.

Inventions and patents

In the early eighteenth century, farming in Britain was done much the same way it had been for centuries. By the middle of the nineteenth century, new farming methods and inventions had transformed agriculture. Clothing and other goods were now made in factories, not by hand. We know about these changes from the **patents** inventors filed, which included descriptions of their inventions.

Writers of the time

People who created new farming methods often wrote books and pamphlets about their ideas. Other writers documented the improvements and changes they saw. By the mid-nineteenth century, writers were also noting the working conditions in factories and the rapid growth of cities.



SOURCE 2 An excerpt from Charles Dickens' novel *Hard Times*, in which he describes an industrial town. Dickens' novels often reflected the circumstances of the Industrial Revolution, which he saw happening around him. They are well known for portraying the negative side of that period. In fact, the term 'Dickensian' has come to refer to the poor social conditions of the time.

It was a town of red brick, or of brick that would have been red if the smoke and ashes had allowed it; but as matters stood, it was a town of unnatural red and black ... It was a town of machinery and tall chimneys, out of which interminable serpents of smoke trailed themselves for ever and ever, and never got uncoiled. It had a black canal in it, and a river that ran purple with ill-smelling dye, and vast piles of building full of windows where there was a rattling and a trembling all day long, and where the piston of the steam-engine worked monotonously up and down, like the head of an elephant in a state of melancholy madness.

SkillBuilder discussion

Analysing

1. Read **SOURCE 2**. What materials were used to build the town described by Charles Dickens?
2. How does Dickens describe the impact of industrialisation on the town's environment?
3. What does the imagery of 'interminable serpents of smoke' suggest about the town's air quality during the Industrial Revolution?

Census figures

The first complete census of England and Wales in 1801 recorded a population of 8.8 million. By 1881, this had nearly tripled to 25.9 million. These figures also show a shift from a **rural population** to an **urban population**, with more people working in manufacturing.

Art

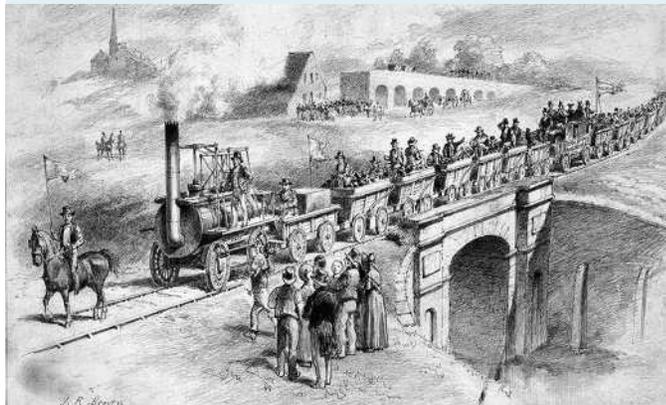
In the 1700s, British artists were famous for paintings of peaceful country landscapes. By the early nineteenth century, they began to show the new industrial towns, showing factory chimneys and busy activities. Artists also painted the development of railways and other transport changes.

SkillBuilder discussion

Analysing

1. What positive impacts of progress can you see in the image in **SOURCE 3**?
2. What potential negative impacts of progress might be visible in this image?

SOURCE 3 A drawing of the opening of the Stockton and Darlington Railway, 27 September 1825.



13.2 SkillBuilder activity **EVALUATING**

Compare the impressions of the Industrial Revolution expressed in the sources in this lesson.

1. For each source, decide if it gives a positive or a negative view of the time using a four-point scale: very negative, somewhat negative, somewhat positive, very positive. Explain what makes it 'positive' or 'negative'.
2. List the changes brought by the Industrial Revolution mentioned in each source.
3. Think about why each source was created. Was it to entertain, inform or persuade? **Explain** how that might affect how useful the source is for students or historians studying this period.
4. From what you know so far, **decide** which of the three sources in this lesson is the most reliable and valuable for historians. Which do you think we should be most careful of at face value? **Justify** your answer.
5. How useful is the work of artists and writers to learn about this period?

13.2 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 6

■ LEVEL 3

5, 7, 8

REMEMBER AND UNDERSTAND

1. Use the words provided in the following table to fill the gaps and complete the paragraph below.

TABLE 1

Middle	New	Britain	transformation
reshaped	clothing	transformed	sources
features	not	transport	technological

2. Great _____ changes took place in _____ during the eighteenth and nineteenth centuries. These changes completely _____ the way in which food, _____ and other necessities were produced. _____ materials and _____ of power, along with new forms of _____, _____ a society that had _____ changed dramatically since the _____ Ages. This _____ is the source of many of the _____ of our way of life today.
3. English historian Arnold Toynbee coined the term 'Industrial Revolution' because
 - A. the British people had risen up against the monarchy in revolution.
 - B. of the French Revolution.
 - C. these new technologies had changed British society dramatically in just 100 years.
 - D. of the American Revolution.
4. Select two reasons why the registration of patents provides us with useful information about the period of the Industrial Revolution.
 - A. Because so many of these inventions were really interesting
 - B. Because the inventors had to include a full written description of their inventions
 - C. Because the submissions became official secret documents
 - D. Because many of these patent submissions have survived
5. **Describe** any significant changes that are evident in population census figures for nineteenth-century Britain.

ANALYSE AND APPLY

6. **Explain** what evidence in **SOURCE 3** suggests that a completely new form of transport was being celebrated.
7. Using examples from the information provided in this lesson, **describe** why late nineteenth-century historians believed the changes of the previous hundred years were a major 'revolution'.

EVALUATE AND COMMUNICATE

8. 'The Industrial Revolution created the modern world in which we live.' Based on the material provided in this lesson, **explain** this statement.

Answers and sample responses for this topic are available online.

LESSON 13.3 How did the Industrial Revolution begin and develop?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how a combination of factors led to the beginning and development of the Industrial Revolution.

Tune in

The Industrial Revolution marked the beginning of the technological revolution that continues to affect our lives. Before the Industrial Revolution, people produced things they needed in ways that had not changed in centuries. The Industrial Revolution saw new ideas being applied to producing goods.

Look at **SOURCE 1**. A scene like this would not be out of place some hundreds of years ago, but it is clearly a modern scene. Discuss the following:

1. What does this suggest about the effects of the Industrial Revolution?
2. Does the entire world benefit equally from the technologies that were developed?

SOURCE 1 Farmers in low income countries often continue to use traditional agricultural practices, while industrialised countries have largely adopted mechanised farming techniques.



13.3.1 The Industrial Revolution

The Industrial Revolution began in Britain in the mid-to-late eighteenth century. It was a major period of change when new inventions and ways of working transformed societies. It started because of new machines and better farming methods, easy access to raw materials, and the growth of a wealthy middle class, all helping the economy grow rapidly.

13.3.2 Technology

Two key inventions boosted the Industrial Revolution. First, new machines were created to turn raw cotton into cloth. These machines were too big for homes, so special buildings called factories were built to house them. Second, steam engines were invented to power these machines. Steam power allowed factories to get bigger and produce large amounts of cloth from raw cotton. The textile industry set the example for other industries, and soon, large factory production became common for many different products.

SkillBuilder discussion

Causes and consequences

1. Look at **SOURCE 2**. How did having coal mines nearby affect where factories were built?
2. What happened to where people lived because there were more factories in certain areas?
3. How did changes in farming help get more people to work in factories?



SOURCE 2 Major sites of industrialisation in Britain



Source: Map drawn by Spatial Vision.

13.3.3 Agricultural revolution

Before the eighteenth century, most of the population of Europe worked in some way in food production. In Britain, two changes were occurring by the middle of the eighteenth century:

1. New methods of farming were gaining popularity, improving the quantity and quality of food and the output of fibres such as wool for clothing.
2. Changes in land ownership had been underway for over 100 years. Common land that had been shared by villagers was enclosed by wealthy landowners, creating larger farms on which the new farming methods could be applied more efficiently.

These changes contributed to an increase in population, but did not require those extra people to work on farms. Many of those people became the factory workers of the Industrial Revolution.

13.3.4 Access to raw materials

Steam engines needed good-quality coal to work well and provide strong reliable heat. Britain had lots of coal, which was accessible, so mining grew as factories did. Coal locations influenced where factories were built (see **SOURCE 2**). Britain also had plenty of iron ore, which could be turned into steel for making factory machines and other useful equipment.

Wealthy middle class

In medieval Europe and Britain, most people were lower-class peasants working land owned by upper-class aristocrats. The **middle class** were skilled workers and merchants living in towns; they were a small group during the Middle Ages.

Did you know?

The Industrial Revolution wasn't funded by kings or governments — it was powered by the piggy banks of Britain's middle class. As trade made merchants, shopkeepers and professionals wealthy, they pooled their savings to fund mechanised factories. Without these middle-class investors opening their wallets, the steam-powered revolution might never have happened.

Transport

Britain is a fairly small country with easy access to the sea through large ports. Transporting raw materials to factories and finished products to customers, both local and overseas, was fairly simple. River transport was very efficient, and canals were built to connect many rivers. The development of steam engines eventually transformed transport networks across Britain and the world.

13.3.5 Expanding empire

Since the great age of exploration in the sixteenth century, European ships and merchants travelled all over the world and found many new products to bring back to Europe. The Spanish and Portuguese conquered most of South America, and the Dutch colonised the islands now called Indonesia. The British established colonies in North America, the Caribbean, India and West Africa. They realised they could import raw materials from their colonies and turn them into finished products to sell to the growing population. The East India Company, started in the 1600s, became a powerful trading group and helped Britain gain influence in Asia. So, by the eighteenth century, many factors came together to allow the Industrial Revolution to start in Britain.

The British in North America

The Spanish, Portuguese and French established colonies in North and South America in the sixteenth century. The British founded their first **colony** in North America in 1607. Soon, the European nations fought for control of the continent. Between 1756 and 1763, the British and French fought in the 'Seven Years' War' and battled for Canadian territories. The British defeated the French and took control of eastern Canada. During this time, French troops clashed with the private armies of the East India Company in India. The British side won and extended British influence over most of India. By the end of the war in 1763, Britain controlled a vast **empire**, stretching from North America, through parts of Africa, to India and East Asia.

However, in 1775, the British colonists in North America rebelled against British rule, starting a war in which Britain lost control of those colonies. In 1783, the Treaty of Paris was signed between Britain and the representatives of the former colonies, which became the modern-day United States of America.

SOURCE 3 French and British settlements in North America before 1756



Source: Map drawn by Spatial Vision.

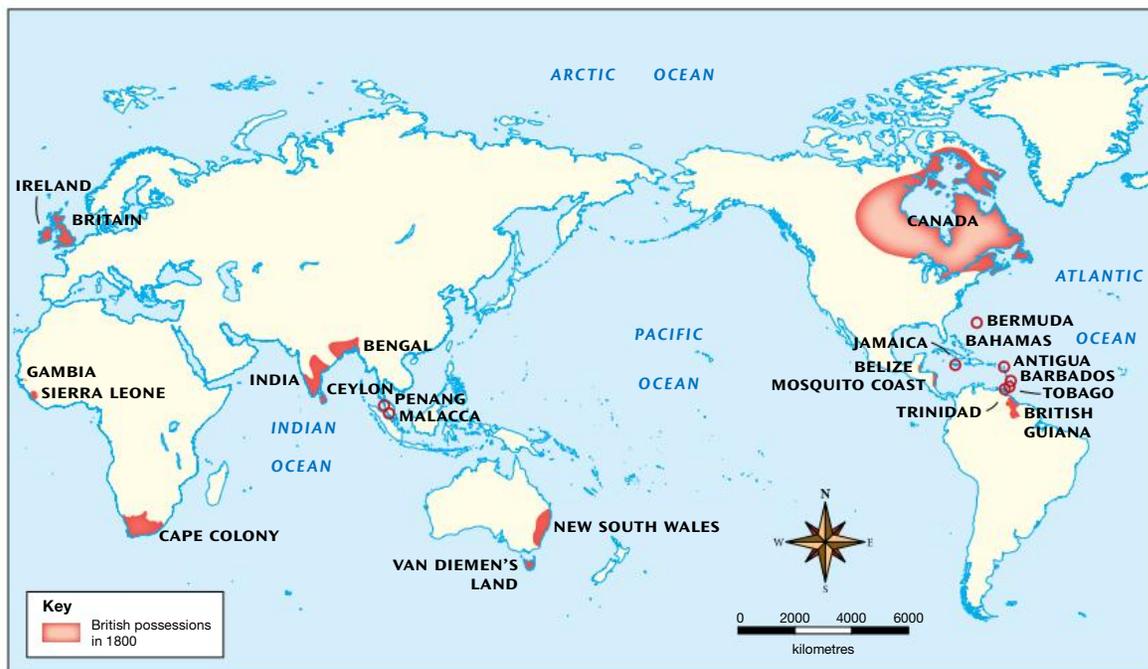
The British Empire and the Industrial Revolution

Despite the loss of the American colonies, by 1800 Britain had established large empire, which provided valuable sources of raw materials for industrial growth. To protect its trading routes, Britain established the most powerful navy in the world, along with a very successful shipbuilding industry.

TABLE 1 Main sources of raw materials from different parts of the British Empire

British colony	Raw materials provided
Canada	Furs, timber, fish
Jamaica	Sugar, coffee
British Guiana	Sugar, tobacco
Gambia	Cocoa
Bermuda	Salt, whale oil, baleen
India	Cotton, tea, timber, sugar
Penang and Malacca	Spices, timber
Ceylon (now Sri Lanka)	Tea, timber, cocoa
New South Wales	Whale oil, baleen, wool

SOURCE 4 The British Empire in 1800



Source: Map drawn by Spatial Vision.

SkillBuilder discussion

Evaluating

1. Refer to **SOURCE 4**. How did resources like cotton, tea and timber from British colonies helped the British empire grow in the 1800s?
2. What industry changes occurred in Britain and its colonies from 1800 to 1850 due to industrialisation?
3. The first railways transformed Britain. How did transport and communication advances help the British Empire's trade network evolve from 1800 to the early twentieth century?

13.3.6 Industrialisation across the world

As the first country to experience **industrialisation**, Britain led the world in factory production and the mechanisation of transport and agriculture.

By 1850, Britain was the most powerful industrial country, making more than half the world's textiles, 80 per cent of its coal, and nearly half its iron. Other countries relied on British engineers to build their railways and bought British machinery for their factories. British steam engines were the largest and most powerful, and were sent all over the world.

By 1815, Britain and Europe were at peace, able to share ideas and trade. The new industrial methods from Britain spread quickly to other countries.

France

In France, the first railways started in 1832. While French **entrepreneurs** and banks financed these, British engineers supervised almost all railway construction. British locomotives were used until the 1850s when France began making its own. Industrialisation progressed slowly in France, where agriculture was still the main economic activity.

Germany

Germany did not become a unified country until 1871. Industrialisation occurred initially in Prussia, the most powerful of the independent German states. With access to the rich coal and iron ore deposits in the Rhineland, the Prussians quickly built a thriving iron and steel industry. The first German railways were built in 1835 but by 1850 the German states had built almost half as much railway track as in Britain, and twice as much as in France. After unification in 1871, Germany quickly expanded its industrial production; by the early twentieth century it was producing more steel than Britain.

The United States

The Industrial Revolution also spread quickly to North America. Following their independence from Britain in 1783, the Americans developed their own industries, such as Samuel Slater's technology for water-powered textile production in 1793. American inventors like Robert Fulton pioneered steam-powered boats in the early nineteenth century. Samuel Morse developed the telegraph in the 1840s, and Alexander Graham Bell was the first to patent a workable telephone in 1876. These inventions revolutionised communications. As in Europe, Americans quickly developed iron and steel industries, and built a network of railways during the nineteenth century.

Japan

From the early seventeenth century until 1868, Japan had largely isolated itself from the outside world. However, in 1868 the new Meiji Emperor decided to modernise Japan by looking to the west, starting a series of reforms. He built up the navy and sent Japanese ships worldwide to trade. A modern communications system was set up and railways were constructed to connect all of the major cities and towns. An education system was set up based on modern western knowledge, and Japanese students travelled the world to learn of the latest technological developments.

SOURCE 5 Alexander Graham Bell was the first to patent a workable telephone. In this photograph, he is making the first call from New York to Chicago in 1892.



TABLE 2 Japanese industrial growth 1875–1913. Industrialisation was a key part of Japanese modernisation in the late nineteenth and early twentieth centuries.

Year	Coal production (metric tonnes)	Railway distances (kilometres)	Rolled steel production (metric tonnes)
1875	600 000	30	
1885	120 000	750	
1895	5 000 000	3500	
1901	10 000 000	5800	5000
1905	13 000 000	7850	65 000
1911	19 000 000	10 500	184 000
1913	21 300 000	11 850	219 500

Source: Adapted from <http://www.sjsu.edu/faculty/watkins/meiji.htm> and *The Cambridge History of Japan*, Volume 6 at p. 430.

Japan learned from Britain about the significance of a successful textile industry, and quickly changed the traditional home-based industry into modern factory production. By the early 1900s, Japanese textiles were sold all over the world. Japan also realised it was important to import raw materials and export finished products. They set up a successful iron and steel industry using imported iron ore and coal.

13.3 SkillBuilder activity

QUESTIONING AND RESEARCHING

Exploring archives

Using a variety of online resources that historians would use, such as Google Scholar or Trove, research the living conditions in two countries during the Industrial Revolution. Follow the steps below:

1. Access an appropriate resource on your device.
2. Begin with a broad and simple search term that might result in some relevant sources. What search term will you use? How could you refine your search to find more focused information?
3. When you have accessed some sources, use them to find out about living conditions. What do they say? Did living conditions improve? Did they worsen? Is it possible to simply say that everybody had the same experience? Whose perspectives are you reading?
4. **Evaluate** the sources you have used. Could they be subjective? How are they valuable? How are they limited?
5. **Compare** your results in pairs or small groups in your class. What similarities and differences did you discover? Display your findings visually or through an appropriate medium in consultation with your teacher.

13.3 Exercise

learn on

Learning pathways

■ LEVEL 1

1, 2, 3, 6

■ LEVEL 2

4, 5, 7, 8

■ LEVEL 3

9, 10

REMEMBER AND UNDERSTAND

1. Britain was the dominant industrial power in the world in 1850. True or false?
2. Identify the two American inventions that contributed to the eventual development of worldwide communications networks.

A. The cotton gin	B. The telephone
C. Steam power to drive boats	D. The telegraph

3. Select two aspects of industrialisation that the Japanese were able to learn from the established industrial powers.
 - A. Iron and steel
 - B. Education
 - C. Navy
 - D. Textiles
4. **Explain** how Germany was able to overtake Britain in the industrialisation process by the beginning of the twentieth century.
5. **State** two examples of innovations contributing to industrialisation that were pioneered in the United States.

ANALYSE AND APPLY

6. **Identify** another form of technology that **SOURCE 5** tells us was in common usage by the end of the nineteenth century.
7. Use **TABLE 2** to **calculate** the percentage growth between 1875 and 1913 of:
 - a. Japanese coal production
 - b. Japanese railway distances.
8. Japanese steel production only commenced in 1901. Use **TABLE 2** to **create** a line graph demonstrating the growth in production between 1901 and 1913.
9. Based on the experiences of Europe, the United States and Japan, **identify** three factors that you believe are necessary for a pre-industrial society to make the transition to an industrial society in a relatively short period.
10. Britain, France, Germany and the United States were all able to industrialise using their own resources of coal and iron ore. **Determine** how Japan was able to industrialise without having these natural resources.

Answers and sample responses for this topic are available online.

LESSON 13.4 How did changes in agriculture result in changes in society?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** developments in agriculture and the impact they had on people and society.

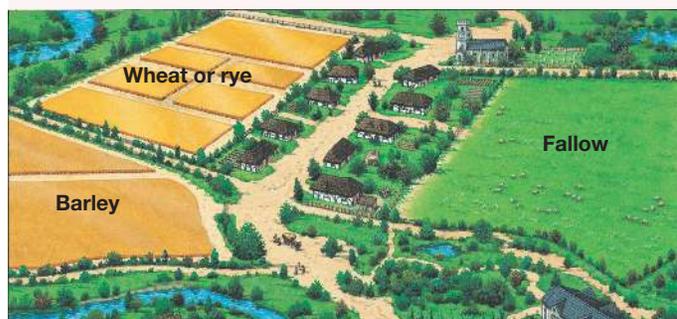
Tune in

Have you or your family ever tried growing your own veggies? Even in a small garden it can be very time consuming and tiring to plant a few rows of seeds. Imagine if entire fields had to be sowed that way. Now imagine how much quicker it would be if you had some automation with the planting of the seeds and some fertiliser to help them grow. You could sow more seeds more efficiently. More plants would germinate, grow and ripen, and could support a growing population.

SOURCE 1 shows traditional open-field farming. One field out of three was left 'fallow' (with no crops planted) each year so it could replenish its nutrients. Discuss the following:

1. What does having one field lying fallow mean for the yield (amount of produce) of the farm overall?
2. What if all three fields could grow crops each year? What would that mean for the yield of the farm?

SOURCE 1 Three-field rotation meant that one-third of the land would lie idle each year.



13.4.1 Traditional open-field farming

At the time of the Industrial Revolution, major changes in farming practices were happening throughout Britain that would revolutionise agriculture. Farms started producing more food to feed the growing population, especially the people in cities working in new industries.

The traditional open-field village was based on **subsistence farming**, producing only enough food for everyone living there, who were peasants or tenants of the landowner. They used a method called crop rotation across three large fields. One field would grow wheat or rye, another barley, and the third was left empty (fallow) for a year so it could recover. Each year the crops would be rotated, so each field would lie fallow for one year in every three. Each village household was given a number of strips in each field. These would usually be spread out so that everyone had equal access to the best land. Villagers also shared a common area where they could graze livestock and collect firewood. Grazing animals on the fallow field helped fertilise it for planting the next year.

Disadvantages of the open-field system

In 1750 about half of all farming in England still used this approach, but the system had disadvantages.

- It was very inefficient because:
 - one-third of the land was left unplanted each year
 - pathways separating the strips of land were not used for crops
 - time was wasted because each farmer had to look after a number of strips scattered across the different fields.
- Weeds and animal diseases could spread easily as everyone was sharing so much of the available land.
- There was very little opportunity to try new crops or new methods because everyone had to grow the same crops and work together.

13.4.2 Key developments

There were three key aspects to the Agricultural Revolution:

1. **Enclosure**: enclosure of the open fields
2. **Technology**: the adoption of new techniques of farming
3. **Business**: the change to a more business-oriented approach to farming.

SkillBuilder discussion

Questioning and researching

SOURCE 2 shows a simple drystone wall in Derbyshire, England.

Why is enclosure significant to the agricultural revolution and how did it lead to further agricultural and societal changes?

SOURCE 2 Stone walls were often used to enclose farms during the eighteenth century.



Enclosure

Enclosure was a process where open fields were combined into single farms, owned by one farmer. These farms were separated from neighbouring farms by hedges or low stone walls. This started as early as the sixteenth century when wealthy landowners began enclosing their land. This meant that peasants, who once worked the land in strips, lost their rights to farm it. If the enclosed farm was large enough, it could be divided into smaller farms which were then leased to peasants. Peasants had to become paid workers on the enclosed farm or find work in nearby towns. Enclosure gave the farmer/landowner more control over the entire farm, wasted less land, and kept animals separate from neighbours' livestock.

Technology

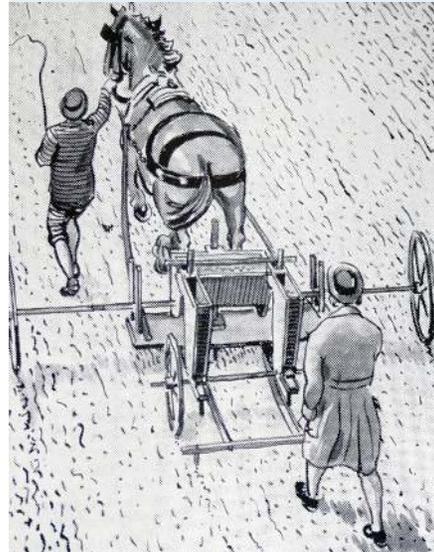
With more control over their farms and animals, farmers could use new and better farming methods. They also used new tools that made farming more efficient. For example, the Jethro Tull seed drill allowed for planting seeds more efficiently. This simple device helped produce crops five times larger than the old methods.

The Rotherham plough was another invention by Joseph Foljambe that helped farms work more efficiently. Rather than heavy wooden ploughs that had to be pulled by four oxen with two labourers, the Rotherham plough could be pulled by two horses and one driver.

SOURCE 3 Traditional ploughing required a team of four or more oxen, an ox driver and a ploughman to operate the heavy rectangular wooden plough, as shown in this artwork based on fourteenth-century illustrations.



SOURCE 4 Jethro Tull's seed drill, as depicted in this nineteenth-century illustration, revolutionised the planting of crops in England.



SkillBuilder discussion

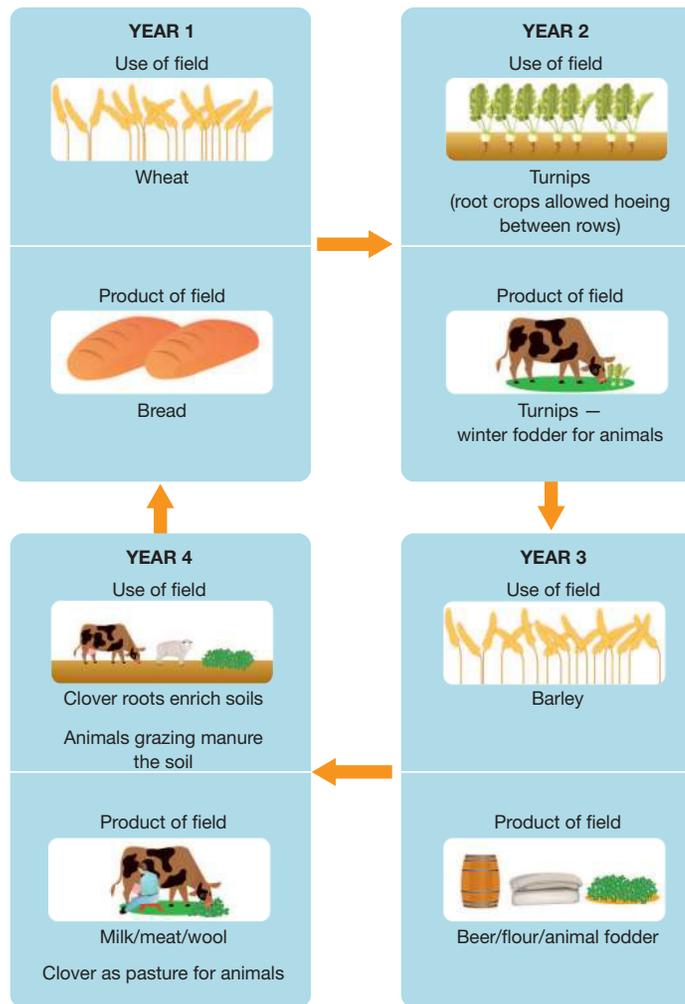
Questioning and researching

Study the image of Jethro Tull's seed drill in **SOURCE 4**. What questions do you have about this and how it could have revolutionised the planting of crops?

Changes in crop rotation methods

Crop rotation methods, like the four-year rotation system, were important for improving farming. By changing the types of crops grown on the same land each year, the soil stayed healthy and productive. This increased food production and supported population growth, which led to many changes in society. More food meant more people could live in cities, which helped the Industrial Revolution.

SOURCE 5 A diagram of crop rotation over a four year period



Improved stock-breeding methods

Farmers began selective breeding of sheep and cattle, using only the largest and strongest animals which then produced offspring with the best characteristics. The new Leicester breed, introduced in 1755, was a great example of selective breeding.

A business approach to farming

Before the eighteenth century, farms mostly grew food and made clothes for local use. Any extra was sold at markets, but it was not much. The improvements in farming during the agricultural revolution meant that farmers could grow more food. This extra food could feed the growing city populations. This was good for farmers who used new methods and sold their produce, which also helped the economy grow.

SOURCE 6 New Leicester sheep were bred by Robert Bakewell. Can you see why they were successful for both wool and meat production?



So, when all these new developments came together, farming produced much more food. This helped support a growing population and encouraged more people to live in cities.



SOURCE 7 Improvements in farming output

The agricultural revolution produced great improvements in the quantity and quality of both crops and livestock. In 1705 England exported 150 million kilograms of wheat, but by 1765 this had risen to 1235 million kilograms. In 1710 sheep sold at market weighed an average 13 kilograms, while cattle weighed an average 167 kilograms. By 1795 this had risen to 36 kilograms for sheep and 360 kilograms for cattle.

Skill Builder discussion

Analysing

SOURCE 7 reveals the large-scale changes that occurred.

1. How is data like this useful for historians studying this period?
2. What can these sources of information show that a painting cannot?

TABLE 1 Urban and rural population growth in England and Wales, 1751–1861

Year	Total	Urban population	Rural population	Urban (%)	Rural (%)	Urban increase	Rural increase	Urban increase (%)	Rural increase (%)
1751	5 772 000 (estimated)	1 443 000 (estimated)	4 329 000 (estimated)	25.00 (estimated)	75.00 (estimated)	—	—	—	—
1801	8 893 000	3 009 000	5 884 000	33.84	66.16	1 566 000	1 555 000	108.52	35.92
1821	12 000 000	4 805 000	7 195 000	40.04	59.96	1 796 000	1 311 000	59.69	22.28
1841	15 914 000	7 693 000	8 221 000	48.34	51.66	2 888 000	1 026 000	60.10	14.26
1861	20 066 000	11 784 000	8 282 000	58.73	41.27	4 091 000	61 000	53.18	0.74

13.4.3 How did all this affect people?

Agricultural change allowed Britain to support a larger population, especially in towns and cities. Population statistics show from the late 1700s, towns grew faster than the countryside (see **TABLE 1**).

In rural areas, farm owners benefited from changes like enclosure, where common lands were fenced off. This helped them run their farms more efficiently and make more money. However, many farm workers suffered because of these changes.

Before enclosure, farm workers had some independence. They could collect firewood, keep animals on common land, and grow their own food. Enclosure took away these rights, forcing workers to rely only on wages. They also lost extra income from spinning yarn and weaving cloth, as factories took over these jobs.

Most farm workers were hired on a casual basis, meaning they were paid daily based on the amount of work they did. If there was no work or if the harvest was poor, they did not get paid. Therefore, there was no guarantee of a steady income for farm workers. Simply put, their lives became much harder.

SOURCE 8 From D. Davies, *The Case of the Labourers in Husbandry*, 1795

... for a dubious economic benefit, an amazing number of people have been reduced from a comfortable state of partial independence to the precarious condition of mere hirelings ...

Conditions in many rural areas became so bad for poor farm labourers that some were driven to extreme action to survive and to try and protect their traditional way of life.

For example, bad weather in 1794–95 had seriously reduced wheat crops throughout Britain. In addition, Britain was at war with France, so importing grain was more difficult than usual. This shortage led to a steep rise in the price of wheat, forcing up the cost of bread. High prices led to protests in many parts of the country, known as the ‘food riots’.

SOURCE 9 From the *Ipswich Journal*, August 1795

‘ ... a band of women ... entered various houses and shops, seized all the grain, deposited it in the public hall, and then formed a committee to regulate the price at which it should be sold.’

SkillBuilder discussion

Evaluating

Read **SOURCES 8** and **9**. Discuss the unintended consequences of enclosure on farm labourers.

In the 1820s the increasing use of labour-saving technology such as the **threshing machine** forced large numbers of labourers and their families into poverty. This placed pressure on the systems to care for the poor. In 1830 riots broke out in the south and east of England. The rioters were generally unemployed farm workers, who would burn down haystacks (see **SOURCE 10**) and damage farm machinery they blamed for their hardship. The unrest became known as the Swing Riots because wealthy farmers were sent threatening letters signed by ‘Captain Swing’ – a name used to preserve the anonymity of the group.

SOURCE 10 Burning of haystacks at night was one tactic of the Captain Swing rioters.



The authorities came down very heavily on the rioters when they were caught. Records show that 19 were executed and another 505 were sentenced to transportation to the Australian colonies.

13.4 SkillBuilder activity ANALYSING

Examine **TABLE 1**. We can use it to discover large patterns of change and continuity during the time of the Industrial Revolution in a different way from visual or written sources.

Use the following questions to get started:

1. Was the rural population rising or falling during the period from 1751–1861?
2. **Identify** in which period the urban population experienced the greatest increase in actual numbers.
3. **Explain** why there is such a significant difference in the percentage increase between urban and rural population growth between 1750 and 1801 when the number increase was so similar.
4. If the trends shown in the table continue, what would you predict to see in the statistics for 1881? **Explain** your answer.
5. **Determine** if you can correlate the patterns of change in the table with the information provided in this lesson.
6. **Explain** how the use of statistics and data can help consolidate your understanding of history.

13.4 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 3, 5

■ LEVEL 2

4, 6, 9

■ LEVEL 3

7, 8, 10

REMEMBER AND UNDERSTAND

1. 'Enclosure' of farming lands means enclosing animals in large barns to keep them warm in winter. True or false?
2. Enclosure could allow a farmer to maintain good health and breeding within his livestock. True or false?
3. In **SOURCE 1**, which areas would have been common land?
 - A. Fields A and B
 - B. Field C and the land behind the church
 - C. Fields A, B, C
 - D. Field B and the land behind the church
4. **Explain** how the four-field rotation system was an improvement over the three-field rotation system.
5. **Identify** how the business approach to farming differed from the subsistence approach that had operated previously.

ANALYSE AND APPLY

6. Examine **SOURCE 2**. **Explain** why enclosure made the continuation of communal strip farming impossible.
7. Study **SOURCE 4**. **Explain** how this farming practice contributed to increased agricultural productivity.
8. By comparing **SOURCES 1** and **5**, **explain** how enclosure and the use of the four-field system might have overcome the disadvantages of the three-field rotation system.
9. Read **SOURCE 7** and answer the following.
 - a. By what percentage did wheat exports rise between 1705 and 1765?
 - b. How might we explain the increase in weight of livestock sold for slaughter between 1710 and 1795?

EVALUATE AND COMMUNICATE

10. **Explain** why each of the following innovations could only have occurred after the enclosure of farms.
 - a. The four-field crop rotation system
 - b. Selective breeding of animals

Answers and sample responses for this topic are available online.

LESSON 13.5 Key developments and technology

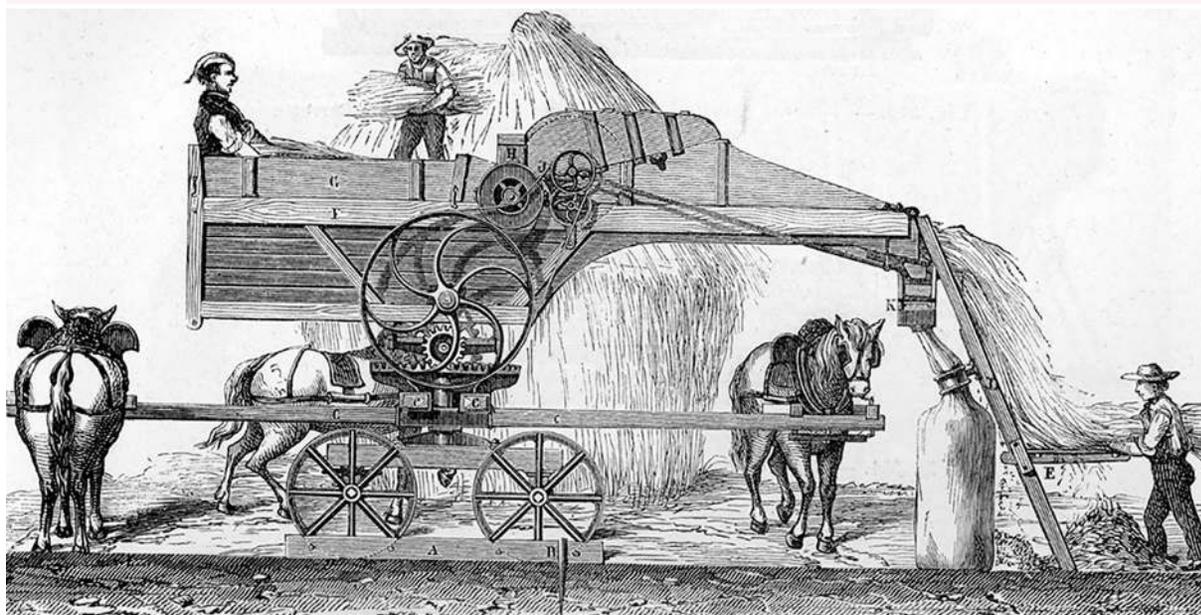
LEARNING INTENTION

By the end of this lesson you should be able to **explain** key developments that helped ensure the continuity of the Industrial Revolution.

Tune in

You've already seen some examples of how machinery was developed to become more efficient. Waterwheels and windmills were widely used before the Industrial Revolution, but it was the introduction of steam power that revolutionised the way machinery worked and the way goods and people were transported.

SOURCE 1 Andrew Meikle's threshing machine, shown in this engraving from c. 1850, is an example of a horse-powered machine.



SOURCE 1 shows a horse-powered machine.

1. What limitations do you think a machine like this might suffer from?
2. What potential might there be if it could be powered by steam?

13.5.1 Horsepower in agriculture and mining

Even with the changes in farming and industry in the 1700s and 1800s, people still relied on horses for power. For example, the threshing machine in **SOURCE 1** used horses. Small ponies, known as pit ponies, pulled carts full of coal in underground coalmines. Horses also pulled canal boats or barges along the paths beside the water (see **SOURCE 2**).

SOURCE 2 Barges were towed along canals by horses as shown in this c. 1880 artwork.



13.5.2 Water power

Water power had been used in England since ancient Roman times. A water wheel, which had blades or buckets around its edge, was turned by flowing water from a stream or river (see **SOURCES 3** and **4**). The power generated by the turning water wheel was used to mill grain into flour.

Early sawmills used water wheels to power large circular saws. Many of the first textile mills in England were powered by water, with the force of the water enough to drive machines in multistorey factory buildings.

SOURCE 3 A medieval flour mill with a water wheel. Water wheels typically date from the twelfth to fifteenth centuries.



SkillBuilder discussion

Analysing

1. Look at **SOURCES 3** and **4**. How did water power influence the growth of early textile mills and industries during the Industrial Revolution?
2. How did reliance on horses for transport and water for power highlight the technological limits of the eighteenth and nineteenth centuries?

SOURCE 4 A photograph of a steam-powered water mill, placed next to a canal for water power.



13.5.3 Wind power

Like water power, wind power had been used in England for centuries. The wind had been used to drive ships since ancient times, and sailing ships were the standard form of sea transport until the mid-nineteenth century. Windmills were introduced to England in the twelfth century. They were used mainly for milling grain to make flour, and later to drive pumps to drain water out of marshlands.

13.5.4 Steam power

One of the most important advances of the Industrial Revolution was the development of steam power. The potential of using steam power had been known for centuries, but the first practical steam engine was the 'atmospheric engine' developed by Thomas Newcomen in 1712 (see **SOURCE 5**). It used steam to drive a piston which powered a large horizontal beam. It was mainly used to pump water out of underground mines, particularly coalmines.

Steam power in coalmines

The Newcomen engine allowed underground coalmines to be dug deeper. Removing excess water had always been a problem in deep-pit mining, limiting the amount and quality of coal that could be extracted. The coalmining industry expanded significantly from the mid-1700s, and coal became a very important fuel during the Industrial Revolution.

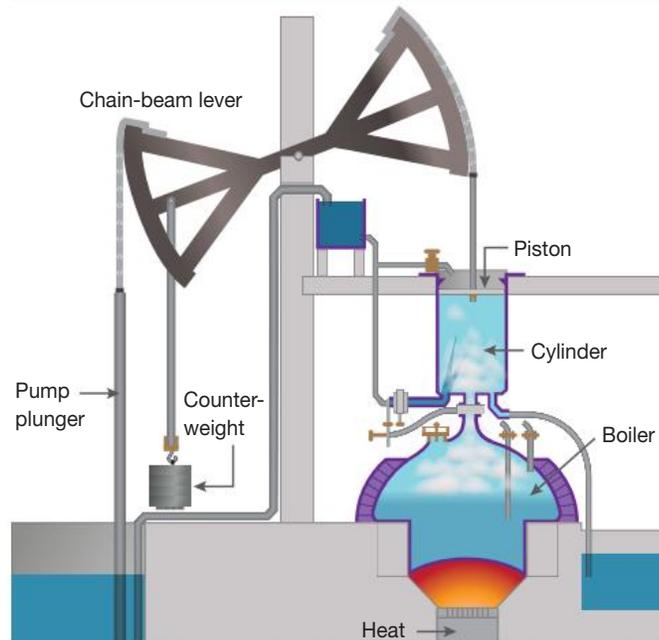
James Watt's steam engine

The next big improvement was James Watt's steam engine, developed around 1769. His steam engine powered a large flywheel, providing continuous power similar to a water wheel. This meant it could be used to power many different types of machinery (see **SOURCE 6**).

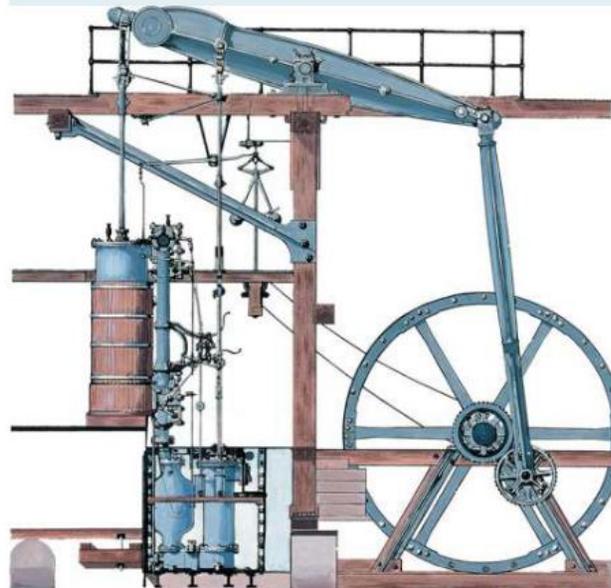
The steam engine helped build bigger factories and was used in coalmines, railways, and steam-driven ships.



SOURCE 5 The Newcomen steam engine drove a large beam that worked a pump to remove water from underground mines.



SOURCE 6 The Boulton and Watt steam engine drove a large wheel that could be used to power many different types of machines.



13.5.5 Transforming the textile industry

Historians agree that the textile industry, especially cotton, drove the Industrial Revolution. In the late eighteenth century, cotton production shifted from homes to factories. Before this, English textile production focused on wool. Cotton was less competitive than Indian imports. Textile work was a **cottage industry** done at home, involving entire families; children cleaned fibres, women spun yarn, and men wove cloth. Raw materials came from diverse regions, including slave labour in America. Merchants supplied raw fibres to villages and collected finished textiles, paying villagers for their work. The processes of carding, spinning and weaving are detailed in **TABLE 1**.

The period after the 1750s saw a greater demand for cotton products. This was due to an increased overseas market for cotton goods, particularly in Europe, and increases in population and domestic incomes. With the domestic industry no longer able to meet this demand, inventors began to develop spinning and weaving machines to improve both the quantity and quality of cloth produced.

Spinners and weavers

Traditionally, one weaver needed three or four spinners for enough yarn. John Kay's flying shuttle, patented in 1733, boosted weaving efficiency, requiring the output of up to a dozen spinners for one weaver. By the 1750s, it was evident that a faster spinning method was necessary, leading to the development of the spinning jenny in the 1760s. Early models spun eight spindles of yarn at once, with later versions handling over 100 spindles.



TABLE 1 Innovations in the textile industry

Inventions	Details
	<p>Traditional textile production step 1: The rough fibres were first manually carded, using two hand-held paddles to untangle and straighten the fibres.</p>
	<p>Traditional textile production step 2: The fibres were spun into thread using a spinning wheel.</p>



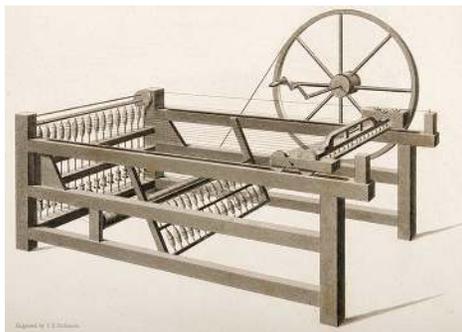
Traditional textile production step 3:

The thread could then be woven into cloth on a hand loom, by passing a shuttle carrying a thread (known as the weft) horizontally through fixed vertical threads (known as the warp).



Innovation in the textile industry, 1733:

John Kay invented the flying shuttle, which allowed weaving to be performed more quickly.



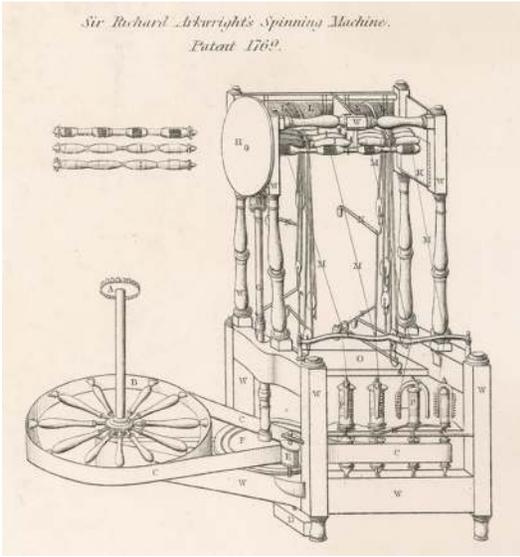
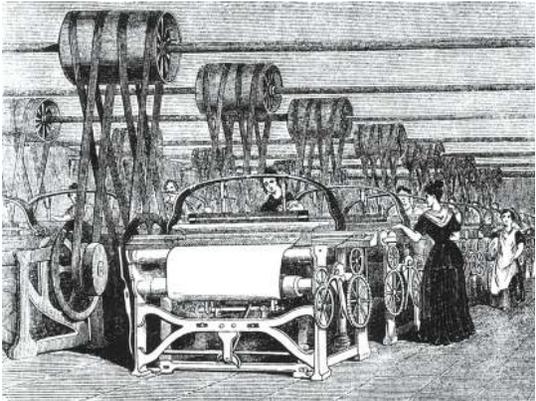
Innovation in the textile industry, 1764:

John Hargraves developed the spinning jenny, which could spin multiple threads simultaneously.

The move to factory production

The new spinning and weaving machines were too big for the cottages of spinners and weavers. Larger buildings were needed to house them, and textile production began to be moved into special factories called cotton mills. By the 1780s all stages of textile manufacture were becoming centralised in mills, particularly in the growing towns of Lancashire in northern England. **TABLE 2** shows the progress made in the textile industry over 50 years.

TABLE 2 Innovations in factories that increased textile production

Innovation	Year	Description
	Water frame	1769 James Arkwright patented the water frame, a spinning machine powered by running water. Similar machines were later powered by steam.
	Spinning mule	1779 Samuel Crompton invented the spinning mule, which improved the spinning process to produce better quality thread.
	Power loom	1780s Textile production began to be centralised in factories. Initially they were built close to rivers to draw on water power, but eventually this became unnecessary as steam power was adopted. Edmund Cartwright developed the power loom, shown in this artwork from c. 1844, which mechanised the weaving process.

SkillBuilder discussion

Communicating and reflecting

There are many sources in this lesson that show technological progress. Work with a partner to make a timeline that tracks the development of these new technologies.

Did you know?

The first large textile factories in England were located in and around the city of Manchester. The term *manchester* is still used in Australia today to describe household cotton-based items such as bed linen, tablecloths and towels.

13.5 SkillBuilder activity COMMUNICATING AND REFLECTING

Your task is to **compile** an annotated visual presentation that demonstrates your understanding of the changes that occurred as new power sources were developed during the early years of the Industrial Revolution.

1. Copy or save the visual sources in this lesson to a file where they can be easily accessed. You can print them so you can easily move them around, or use an appropriate program or app that allows you to drag them easily.
2. Think about how the sources relate to each other. You should **consider** the following questions:
 - Were some impossible without the development of others?
 - Did some become obsolete over time?
 - Were some improvements over others?
 - Did some of them hasten the move away from cottage industries?
 - Did they use new forms of power?
3. Arrange the sources in a way that you can connect them with a short explanation of one or two sentences based on your responses in step 2. They don't need to all connect to each other — that would become a bit too chaotic on your page! But you should be able to put together what might resemble a 'family tree' of the developments of power sources during the Industrial Revolution that will help you understand the patterns of change that occurred.
4. **Compare** your presentation with your classmates. Have others come to similar conclusions? Do you think there is a 'right' answer?

13.5 Exercise

learn **on**

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 6, 7, 9

■ LEVEL 3

5, 8

REMEMBER AND UNDERSTAND

1. Select three options below that are examples of the use of animals as a source of power that continued even after the agricultural and industrial changes of the eighteenth century.
 - A. To haul coal in mines
 - B. Horse-riding competitions
 - C. To power machinery
 - D. To haul barges along canals
2. Fill in the gaps to explain how water was traditionally used to provide power.

The water wheel had _____ or buckets around its rim. It was driven by _____ water from a stream or _____. The power generated _____ grain into _____ and powered early _____.
3. Select two uses of wind power in traditional pre-industrial society.
 - A. Water mills
 - B. Windmills
 - C. Sailing ships
 - D. Steamships
4. **Explain** two factors that led to an increased demand for cotton products by the 1750s.
5. **Identify** why it became necessary to move away from cottage textile production to factory production. ▶

ANALYSE AND APPLY

6. What does **SOURCE 4** tell us about the limitations of water power as a means of driving factory machines?
7. The early years of the Industrial Revolution did not rely on new forms of power, but made innovative use of traditional forms of power. **Outline** two examples where this was the case.

EVALUATE AND COMMUNICATE

8. Suggest what is happening in the first image in **TABLE 1**. Which members of the family would carry out this task?
9. Many historians claim that the Industrial Revolution did not really take off until steam power was widely used. **Discuss** the major contributions that steam power made to the Industrial Revolution.

Answers and sample responses for this topic are available online.

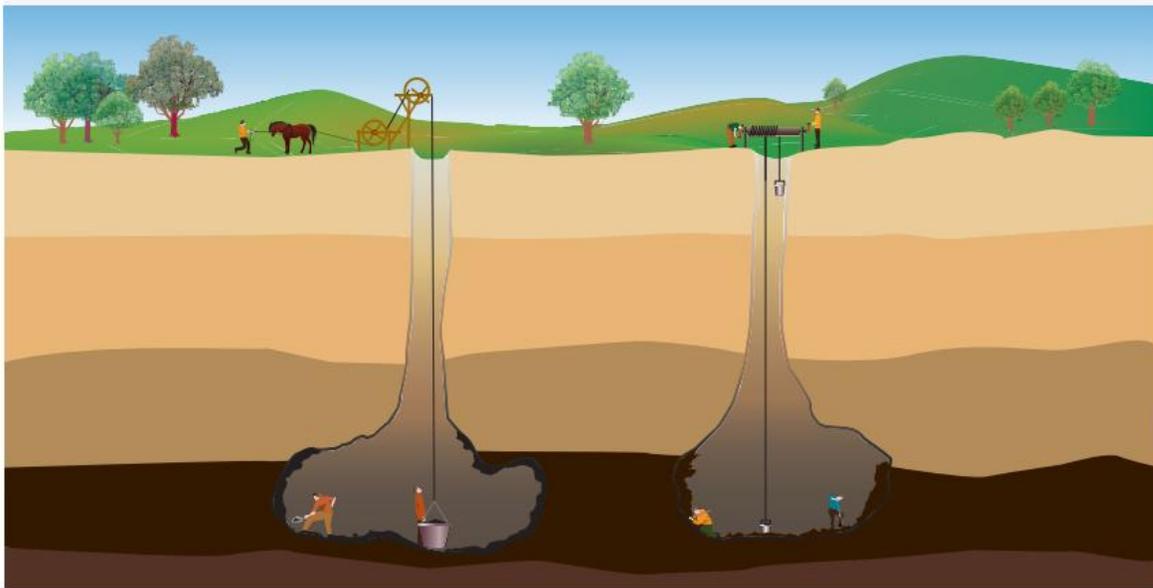
LESSON 13.6 Why coal and iron were so vital

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the relationship between coal and iron and the Industrial Revolution.

Tune in

SOURCE 1 Coalmining was traditionally carried out in shallow bell pits.



1. How would homes and factories use coal?
2. As coal was now able to be accessed more easily (due to developments in coalmining), what do you think happened to its price?
3. What consequence would the price changes in coal have for homes and factories?

13.6.1 Coalmining

The progress of the Industrial Revolution was assisted by the increased use of coal, a more efficient fuel than wood and charcoal. Also, improvements in the production of iron and steel resulted in metals that were stronger and cheaper to produce and could be applied to a wider variety of uses.

Coal is a more efficient fuel than wood, providing longer burn time and greater heat. Britain had abundant coal, but shallow **bell pit** mining made it hard to get and expensive. Deep-pit mining was made difficult by water flooding. Steam-driven pumps removed the water, making coal cheaper and more available, which was important for steam engines during the Industrial Revolution.

13.6.2 Developments in iron production

Methods of making iron had been known in Europe for a long time. To make iron useful for tools, weapons, and other things, iron ore from the ground had to have impurities removed. This was done by heating the ore in a **blast furnace**, called smelting. For many years, the heat source for English blast furnaces was charcoal, made by heating wood. The product of these furnaces was called **pig iron**.

Burning coke in blast furnaces

The growth in coal production meant that coal became more available for use in the smelting process, but impurities in the coal contaminated the iron, reducing its quality.

During the seventeenth century, methods of burning out the impurities in coal to produce **coke** were improved. In 1709 Abraham Darby developed a blast furnace that burned coke to produce iron of a superior quality. Using coke also allowed the building of larger furnaces that could produce more pig iron.

SOURCE 2 The Iron Bridge in Shropshire, England, built by the grandson of Abraham Darby, is an example of late eighteenth-century iron construction.



SkillBuilder discussion

Analysing

1. Look at **SOURCE 2**. Why was building the Iron Bridge in Shropshire important for the Industrial Revolution?
2. How did using iron in the Iron Bridge show advancements in construction?
3. What significance did the Iron Bridge have on infrastructure and industrial progress?

Henry Cort and ‘puddling’

Although pig iron had many uses, it was brittle because it contained carbon. In 1783 Henry Cort developed a method of reducing the carbon content of pig iron through a process known as ‘puddling’. This resulted in a product that was stronger and could be bent, rolled or cast into many different shapes. High-quality iron could now be used for making machinery, boilers for steam-driven engines, and a huge variety of tools and implements, as well as bridges and the framework for buildings.

As iron production methods improved, quantities increased and large-scale production made good-quality iron cheaper. By 1850 Britain was producing more than 70 times as much iron as it had in 1760 (see **TABLE 1**).

TABLE 1 British pig iron production, 1760–1850

Year	Tonnes
1760	30 000
1785	50 000
1796	125 000
1806	244 000
1823	455 000
1830	677 000
1840	1 400 000
1850	2 200 000

Source: P. Riden, ‘The output of the British iron industry before 1870’, in *Economic History Review*, 2nd series, pp. 443, 448, 455.

13.6 SkillBuilder activity

COMMUNICATING AND REFLECTING

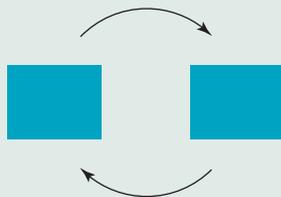
‘The Industrial Revolution helped to increase coal and steel production.’

‘Increasing coal and steel production helped fuel the Industrial Revolution.’

Your task is to imagine how both these statements could be true, despite them sounding very different.

1. **Consider** the new technologies that affected the following:
 - accessibility of coal
 - production of stronger iron
 - amount of iron that could be produced.
2. **Consider** the effects of iron and coal on the following:
 - cost of raw materials to build infrastructure — blast furnaces, bridges etc.
 - quality of raw materials to build infrastructure.

3. Create a diagram similar to the one below. Write the two quotes in the two text boxes and annotate the arrows using your thoughts from 1 and 2 to **explain** how each statement could be a cause of the other.



4. Synthesise your thoughts to answer the question, 'How was the Industrial Revolution a cycle of cause and effect?'

13.6 Exercise

learn **on**

Learning pathways

■ LEVEL 1

1, 2, 3, 5

■ LEVEL 2

4, 6, 7

■ LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

- Why was coal a preferable fuel to the burning of wood?
 - It was less efficient.
 - It was more efficient.
 - It was more plentiful.
 - It was less plentiful.
- Pig iron and coal had been used as the traditional source of heat for English blast furnaces. True or false?
- In what way did Henry Cort's process of puddling improve the production of iron? Select all options that apply.
 - It greatly increased the carbon content of iron.
 - It greatly reduced the carbon content of iron.
 - It made it more flexible.
 - It could be rolled or bent.
- Identify** the problem that Abraham Darby was able to solve and explain his solution.

ANALYSE AND APPLY

- Describe** how coal was extracted from the bell pits depicted in **SOURCE 1**.
- Explain** how this method of mining limited the use of coal before the eighteenth century.
- The Iron Bridge shown in **SOURCE 2** was opened in the 1780s. **Explain** why such a bridge would not have been practical before this time.
- Use the information in **TABLE 1** to **create** a line graph. Make sure you keep both the X and Y axes to scale.

EVALUATE AND COMMUNICATE

- Would it have been possible to increase the quantities and improve the quality of iron products if coalmining techniques had not also improved at around the same time? **Justify** your answer.
- Evaluate** in what ways the figures in **TABLE 1** suggest that a revolutionary change occurred in Britain between 1760 and 1850.

Answers and sample responses for this topic are available online.

LESSON 13.7 The importance of investment

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the role of capital, investment and banking in supporting the emerging Industrial Revolution.

Tune in

While **SOURCE 1** is not a picture of the stock exchange, it highlights how the stock market allowed people to invest in companies by buying shares. During the Industrial Revolution, this process was crucial for funding the construction of mills, factories and railways. Individuals sold parts of their companies to raise capital, and as share investment grew, it enabled many innovations with political support.

1. How did funding and investment impact the development and expansion of mills like Houldsworth Mill?
2. As a wider consequence, how important was investment for the progress of the industrial revolution?

SOURCE 1 Houldsworth Mill in Stockport, England (also known as Reddish Mill) was built in 1865, designed by Abraham Stott.



13.7.1 Entrepreneurship and the middle class

In medieval Europe, the most powerful class was the land-owning aristocracy, while most people were peasants who worked the land. The middle class included the tradesmen, craftsmen and merchants, most of whom lived in the towns. In the sixteenth century trade and business grew in Britain, and many middle-class people became wealthy. Some bought land from nobles and started farming for profit. Many of these businesspeople joined parliament and made laws to support trade and business.

From 1642, the English Civil War broke out in Britain between the middle-class parliamentarians and their supporters on the one side, and the king and the aristocracy on the other. King Charles I was **deposed** and executed in 1649, and parliament ruled without a king for 11 years. When the monarchy was restored in 1660, the new King Charles II had to negotiate with a much more powerful parliament. The civil war victory gave the middle class more power in Britain, and the English Parliament came to strongly represent the interests of merchants, traders and businesspeople.

Government support for business

Between 1650 and 1673 Parliament passed the Navigation Acts, which required all goods traded between Britain and its colonies to be carried in British ships. There was also stronger enforcement of the Statute of Monopolies of 1623, which protected the rights of inventors to profit from patents on their inventions. By the eighteenth century, Britain had an environment that favoured **entrepreneurship**.

Scottish philosopher Adam Smith recognised the value of having a government supportive of trade and commerce in his 1776 book *The Wealth of Nations* (see **SOURCE 2**).

SOURCE 2 Adam Smith, *The Wealth of Nations*, 1776

To found a great empire for the sole purpose of raising up a people of customers may at first sight appear a project fit only for a nation of shopkeepers. It is, however, a project altogether unfit for a nation of shopkeepers; but extremely fit for a nation whose government is influenced by shopkeepers.

SkillBuilder discussion

Analysing

1. What is the quote in **SOURCE 2** actually saying?
2. Discuss how Adam Smith's *The Wealth of Nations* writing illustrates eighteenth-century British economic policies?

SOURCE 3 Adam Smith, whose head has appeared on the British £20 note, believed that entrepreneurship was a significant factor in the creation of wealth.



Entrepreneurship

More and more people saw the advantages of investing in business opportunities. Developments in agriculture encouraged farmers to run their farms to make a profit. Innovations in the textile industry led to investment in larger factories. The increasing demand for iron and coal made investment in larger-scale mining profitable. Much of the progress made during the Industrial Revolution was due to the availability of money through a well-organised banking system, and a willingness of entrepreneurs to invest that money in business ventures.

13.7.2 The importance of banks

Banks are essential for our modern economy, enabling us to save, borrow and finance various business ventures. In pre-industrial times, industries like textiles and shallow coalmining didn't need much equipment. However, building factories or deep-pit mines required a lot of money, highlighting the need for an organised banking system.

Growth of the banking system

Modern banking originated in Renaissance Italy, specifically Venice and Florence. In England and Scotland, banking practices flourished in the sixteenth and seventeenth centuries, especially after laws changed in 1546 to allow interest on loans. This made it profitable to lend money for business projects.

Goldsmith bankers

In the sixteenth and seventeenth centuries, **goldsmiths** engaged in early banking activities, including keeping money and valuables safe, and exchanging foreign currency. By the early eighteenth century, they had established a network of private banks that funded business enterprises.

SOURCE 4 The Bank of England, established in 1694, became the major source of lending for the government. This artwork was created in the nineteenth century.



SkillBuilder discussion

Analysing

1. Describe the scene shown in **SOURCE 4**. How does this differ from banks today?
2. How did eighteenth-century banking practices differ from earlier pre-industrial financial systems?
3. How did lending money with interest from 1546 impact banking growth and business financing, and what shift in economic practices does this reflect?

13.7 SkillBuilder activity QUESTIONING AND RESEARCHING

Adam Smith is often described as the father of modern economics and of modern capitalism. But why is that? Use a range of appropriate resources to research and investigate Smith's ideas and beliefs. Be careful that you consider the origin of your information carefully.

As you undertake your research, use the following sentence starters to organise your information.

Adam Smith's economic beliefs were:

He reached his conclusions by observing:

The way that Smith's economic theories affected the world included:

His theories are still visible today in:

Adam Smith is significant because:

Finish with a closing statement about why Adam Smith is described as the father of modern economics and of modern capitalism.

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

4, 5, 6, 9

■ LEVEL 3

7, 8, 10

REMEMBER AND UNDERSTAND

1. Identify what is meant by *entrepreneurship*.
 - A. Running the Bank of England
 - B. Organising and/or investing in business opportunities
 - C. Investing with the government
 - D. Running for parliament
2. Why were cottage industries able to survive without access to a modern banking system?
 - A. They did not need large amounts of money to run successfully.
 - B. The lord of the manor lent them the money.
 - C. The lord of the manor paid for all their expenses.
 - D. They needed large amounts of money to run successfully.
3. The English Parliament supported business interests during the late seventeenth and early eighteenth centuries with the passing of the Navigation Acts and the enforcement of the Statute of Monopolies. True or false?
4. **Outline** how the middle class in Britain became so powerful by the beginning of the eighteenth century.
5. **Explain** the role of goldsmiths in the development of the banking system.

ANALYSE AND APPLY

6. From **SOURCE 2**, **explain** Adam Smith's attitude to the role of the middle class in influencing government decisions.
7. **Examine SOURCE 3**. **Identify** what is shown in front of Adam Smith's face on this banknote. What does this suggest about the importance of Adam Smith's ideas as an influence on the Industrial Revolution?
8. Using **SOURCE 4**, **explain** the role of banking in supporting industrial growth and investment during the Victorian era.
9. **Analyse** the impact of the legalisation of the charging of interest on borrowed money in England.

EVALUATE AND COMMUNICATE

10. **Explain** how important a successful banking system was as an underlying cause of the Industrial Revolution.

Answers and sample responses for this topic are available online.

LESSON 13.8 The impact of new transport

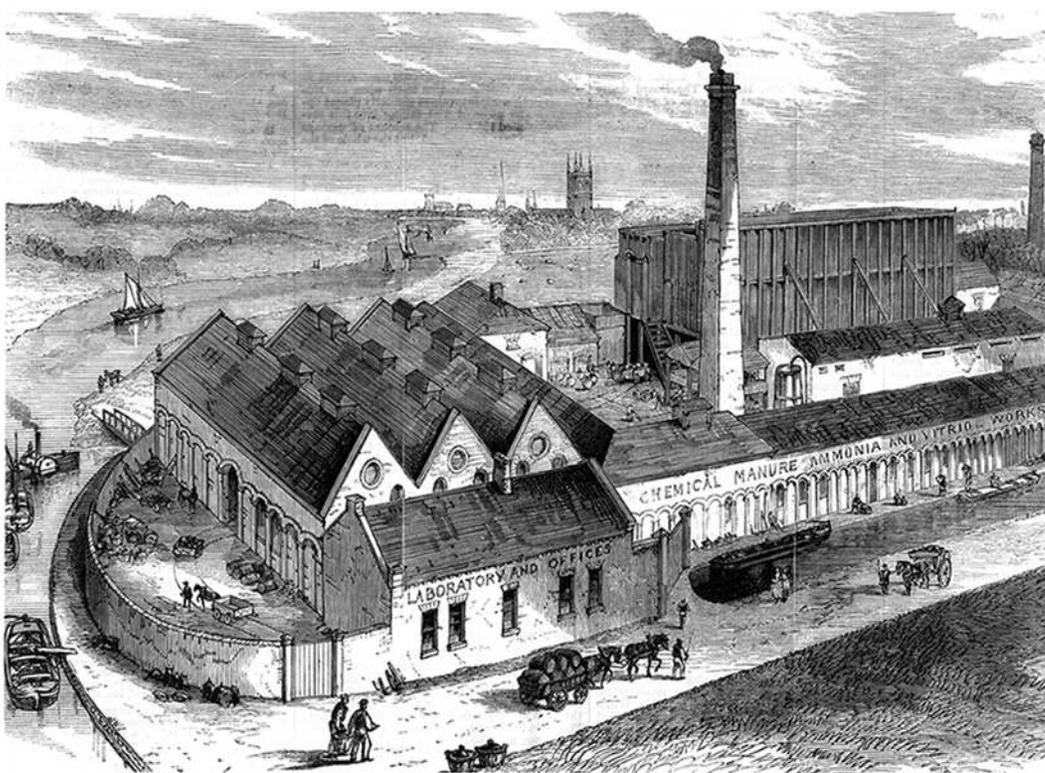
LEARNING INTENTION

By the end of this lesson you should be able to **explain** the revolutionary changes that occurred to transport during the Industrial Revolution.

Tune in

It was all very well for factories to produce goods and to do it more cost effectively as technology developed and improved. But it would have all been for nothing if raw materials could not be brought to the factory or goods could not be taken to their markets.

SOURCE 1 A factory needed access to efficient means of transport to bring in raw materials and send out finished products.



1. Why did new methods of power mean that factories might need to be close to water?
2. What methods of transport are available to the factory in SOURCE 1?
3. How do those methods of transport reflect both old and new technologies of the Industrial Revolution?

13.8.1 The importance of transport

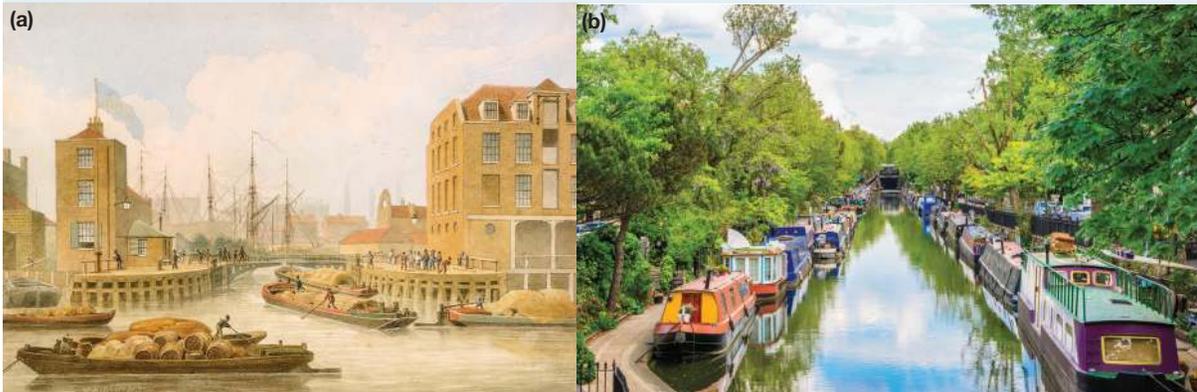
During the Industrial Revolution, new technologies changed farming, the textile industry and mining. Transport also improved significantly, making it easier to get raw materials to factories and finished products to customers faster.

In pre-industrial times, most goods were produced in small quantities by local producers to suit local needs. Industrialisation often meant that production moved away from local supplies and local markets. Factories needed good transport to bring large amounts of raw materials to them and to send finished products out. Factories had to be near water for power, or near coal and water if they used steam power.

13.8.2 Canals

In Britain, water transport was always important. Rivers and coastal shipping were used for centuries, since roads were often just muddy tracks. Boats and barges could carry larger loads than horse-drawn carts. Canals helped transport goods from factories. Horses walked along tow-paths beside the canals to pull barges carrying ten times more weight than carts.

SOURCE 2 (a) Canals became the major method of transporting goods to and from factories. (b) Canals are still used widely in the United Kingdom.



SkillBuilder discussion

Analysing

1. Describe the overall differences that you see in the two images in **SOURCE 2**.
2. What do these differences tell you about how canals were used then and now?
3. How important do you think canals were to the Industrial Revolution?

Private canal owners charged fees for transporting goods, quickly paying back construction costs and making a profit. Transporting coal by canal was cheaper than by road, lowering coal prices in cities like Liverpool and Manchester by half. By 1815, over 3000 km of canals were built across England.

13.8.3 Roads

Before the eighteenth century, major roads between towns and cities were poorly maintained. In the late seventeenth century, local magistrates could charge tolls for road upkeep. From 1707, trustees collected these tolls and managed maintenance, creating 'turnpikes'. By the 1750s, most main roads to London were turnpikes, and by the 1830s, over 30 000 kilometres of turnpikes connected major cities in England, Wales and Scotland, significantly improving road quality.

SOURCE 3 Main roads were often in a poor state of repair, as shown in this artwork from c. 1824.



13.8.4 Railways

One of the biggest advances in transport came with the growth of the railways. This development came as a result of applying steam engines to tramway systems. In coal and iron ore mines, horses were used to pull wagons out of the mines along tracks. By the beginning of the nineteenth century steam technology had to try using steam to drive moving vehicles. The first locomotives were used to pull trucks loaded with coal from mines. These inspired the engineer George Stephenson to promote the use of steam locomotives to haul a wide variety of goods, as well as passengers.

The first successful railways

The first public railway was opened in north-east England in 1825. Designed to carry coal from mines near Darlington to the port of Stockton, it employed George Stephenson's 'Locomotion No. 1' locomotive. Before long, the owners expanded its activities to provide a passenger service with a regular timetable.

In the meantime, Stephenson and his son Robert were contracted to build a railway line between Manchester, the largest textile-producing city, and Liverpool, a major port almost 60 kilometres away. This line opened in 1830 and had two tracks for trains to travel in both directions. It brought raw materials to Manchester and sent finished goods to Liverpool for export. Stephenson's latest locomotive, the 'Rocket', was used on this line. It became very successful and was the model for many railways built later in Britain.

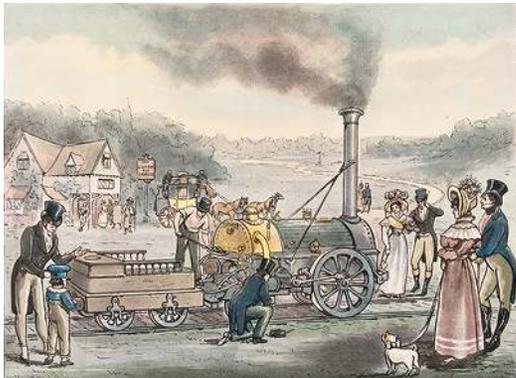
SOURCE 4 Steam locomotives were first used to haul trucks from coalmines, as shown in this nineteenth-century artwork.



The railways expand

The need for fast, efficient transport for both raw materials and industrial products led to a rapid expansion in railway construction. Over the next 20 years, the rail network grew quickly. By 1852 there were more than 10 000 kilometres of track in Britain. Lines extended from London to the coast of Wales and north to Glasgow and Edinburgh in Scotland. The industrialised north and Midlands of England had extensive rail networks, transporting both passengers and a huge variety of goods.

TABLE 1 Three images showing the innovations in railways

Innovation	Description
	<p>Stephenson's Locomotion No. 1 was one of the world's first successful steam locomotives designed to carry both passengers and freight on a public railway. Stephenson's Locomotion No. 1 is now on display at the Darlington Railway Museum. It could reach speeds of 24 km/h.</p>
	<p>Stephenson's Rocket, shown in this 1894 illustration, was first used on the very successful Manchester to Liverpool line. Stephenson's Rocket was the most reliable and fastest engine, reaching speeds of up to 30 mph (48 km/h) - incredibly fast for the time.</p>
	<p>The march of progress! In the 1830s, a railway bridge was built over the original Sankey Canal. This artwork was published in 1831.</p>

SkillBuilder discussion

Analysing

1. How have the artists depicted the progress of the railways in the second two illustrations in **TABLE 1**?
2. Looking at **TABLE 1**, how would you summarise progress in train design from Stephenson's locomotive No.1 to trains of today?

13.8.5 Developments in shipping

Until the late eighteenth century, all ships were built of timber and powered by sail. The Industrial Revolution brought two major changes to shipping. Advances in the processing of iron led to the development of iron hulls for ships. The strength this gave the hull allowed the building of larger ships able to carry more cargo. The second change was using steam power.

SOURCE 5 The *Cutty Sark* was an exception to the general rule of 'steam meaning speed'. It could transport goods more quickly than many steamships of the time and set a record of 83 days for sailing from Sydney to London in 1883. (The First Fleet of 1788 took around 250 days to sail the same distance.)



The age of the clippers

Despite the development of steam power, square-rigged sailing ships continued to be widely used until the 1870s. Built for speed, these ships were said to travel at a 'good clip' (or speed), and were therefore known as clippers. They generally had iron hulls and were able to compete with steam-driven ships because they were much faster than the early steamships and did not need to use valuable cargo space to carry coal for fuel. Clippers were used extensively from the 1840s until the 1880s for trade between Britain and its colonies.

13.8 SkillBuilder activity

COMMUNICATING AND REFLECTING

Using the information in this lesson, your task is to arrange key developments that occurred in road, canal, rail and shipping transport between 1700 and 1860. You can then identify the consequences of each development.

- 1. Identify** and create a timeline of the main developments in transport. Arrange them in your book or using an appropriate program or app and label the key feature of each development; for example, 'speed of transport was increased' or 'more goods could be transported more easily'.
- 2. Consider** the consequence that each development would have on the following:
 - cost of raw materials
 - cost of production of manufactured goods
 - price of manufactured goods to the public.

Learning pathways

■ LEVEL 1

1, 2, 3, 5

■ LEVEL 2

4, 7, 9

■ LEVEL 3

6, 8, 10

REMEMBER AND UNDERSTAND

- Why were reliable methods of transport more important to the process of industrialisation than they had been in pre-industrial society?
 - To transport finished goods to their local and overseas markets
 - To transport raw materials to the factories
 - To transport people around Britain
 - To transport workers to the factories
- The use of a barge towed by a horse on a canal was more economical than a loaded cart pulled by a horse. True or false?
- Complete the following paragraph to identify the two main changes to shipping that resulted from the Industrial Revolution.
Advances in the processing of iron led to the development of _____ for ships. The strength this gave the hull allowed the building of _____ ships able to carry _____ cargo. The second change was the application of _____ to shipping.
- Explain** how the construction of railways revolutionised transport in Britain between 1830 and 1852.
- Describe** what turnpike trusts were and how were they able to improve road transport.

ANALYSE AND APPLY

- Explain** the likely location of the scene shown in **SOURCE 2(a)**. What do you think would be the function of the building on the right side of the painting? **Justify** your answer.
- What message was the artist who produced **SOURCE 3** attempting to convey?
- What does **TABLE 1** tells us about the possible future use of rail transport in the period after 1830, when **compared** with **SOURCE 4**?
- Explain** why it is appropriate to label the third train in **TABLE 1** 'the march of progress'.

EVALUATE AND COMMUNICATE

- While initially designed to carry goods, railways soon began carrying passengers and were able to do so at a relatively cheap fare. **Predict** what impact this might have had on ordinary people and their families.

Answers and sample responses for this topic are available online.

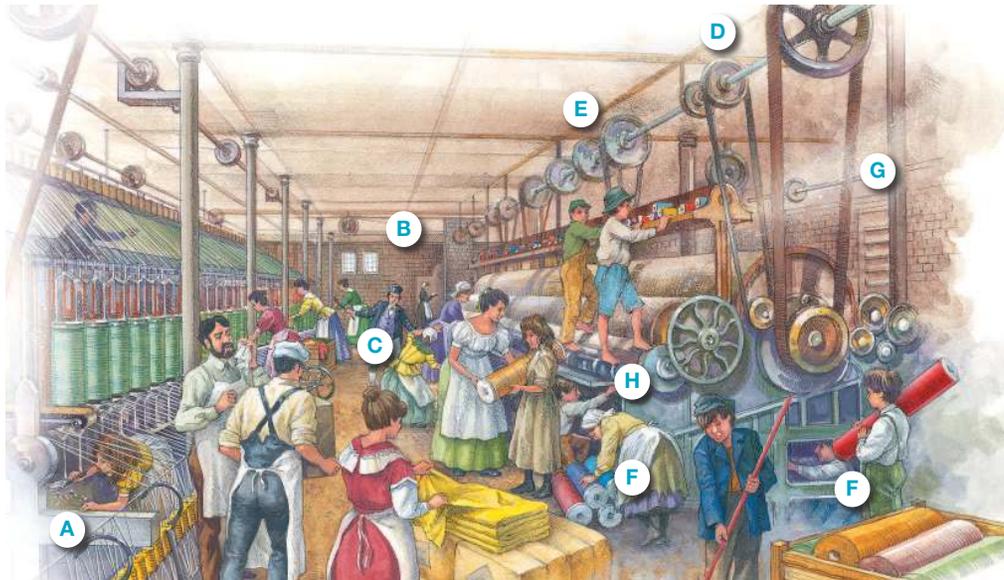
LEARNING INTENTION

By the end of this lesson you should be able to **describe** how working conditions in the mines and factories changed and how the development of cities became a consequence of the Industrial Revolution.

Tune in

A couple of centuries ago, plenty of young people the same age as you — in some cases even much younger — would already be in the workforce. When you get a job, or indeed if you already have part-time or casual employment, you are legally protected by a range of laws to provide a safe working environment and to avoid exploitation. That is not the case in **SOURCE 1**, which illustrates conditions inside a textile mill.

SOURCE 1 An early nineteenth-century textile mill was a dangerous and unhealthy place to work.



- A** Some children were employed as 'scavengers'; they would collect loose pieces of cotton from under machines while the machines were running.
- B** Small windows and lack of ventilation made the factory air hard to breathe.
- C** Overseers would punish anyone responsible for slowing or stopping the machines for any reason.
- D** Machines were driven by belts attached to drive shafts that were powered by a water wheel or steam engine.
- E** Machines had no safety fences or guards around them, so workers were always at risk of injury.
- F** Constant bending and working in cramped conditions often led to physical deformities in factory workers.
- G** Dust and other residues from the cotton found their way into the workers' lungs, causing severe illness.
- H** Some children were employed as 'piecers'; they had to repair broken threads on spinning machines while the machines were still running.

1. What dangers can you see in the image?
2. What protections might be put in place in a modern setting to avoid those dangers?

13.9.1 In the factories

During the early years of the Industrial Revolution, laws protecting workers' rights and workplace safety were not yet established. Factories and mines often had hazardous and unhealthy conditions.

In textile factories of the early nineteenth century, working environments were challenging. Employees worked long hours, often 12 hours or more per day. Conditions were uncomfortable due to poor lighting, inadequate ventilation and excessive heat. Machines lacked safety features such as fences or guards, posing a risk of injury. Children were often employed to work under or between machines to keep them running, even while the machinery was in operation, which increased their risk of harm.



SOURCE 2 From an interview with James Patterson, a factory worker, before a parliamentary committee, June 1832

I worked at Mr. Braid's Mill at Duntruin. We worked as long as we could see. I could not say at what hour we stopped. There was no clock in the mill. There was nobody but the master and the master's son had a watch and so we did not know the time. The operatives were not permitted to have a watch. There was one man who had a watch but it was taken from him because he told the men the time.



SOURCE 3 From an interview with former factory worker Sarah Carpenter, published in *The Ashton Chronicle*, 23 June 1849

There was a young woman, Sarah Goodling, who was poorly and so she stopped her machine. James Birch, the overlooker, knocked her to the floor. She got up as well as she could. He knocked her down again. Then she was carried to the apprentice house. Her bed-fellow found her dead in bed. There was another called Mary. She knocked her food can down on the floor. The master, Mr. Newton, kicked her where he should not do, and it caused her to wear away till she died. There was another, Caroline Thompson. They beat her till she went out of her mind.



SOURCE 4 From the testimony of Dr Michael Ward before a parliamentary committee, 25 March 1819

I have had frequent opportunities of seeing people coming out from the factories and occasionally attending as patients. Last summer I visited three cotton factories with Dr. Clough of Preston and Mr. Barker of Manchester and we could not remain ten minutes in the factory without gasping for breath. How is it possible for those who are doomed to remain there twelve or fifteen hours to endure it? If we take into account the heated temperature of the air, and the contamination of the air, it is a matter of astonishment to my mind, how the work people can bear the confinement for so great a length of time.

SkillBuilder discussion

Analysing

Discuss, in groups, the perspectives of the people in **SOURCES 2, 3 and 4**, and based on these perspectives, what would be your interpretation of conditions in the factories?

13.9.2 In the coalmines

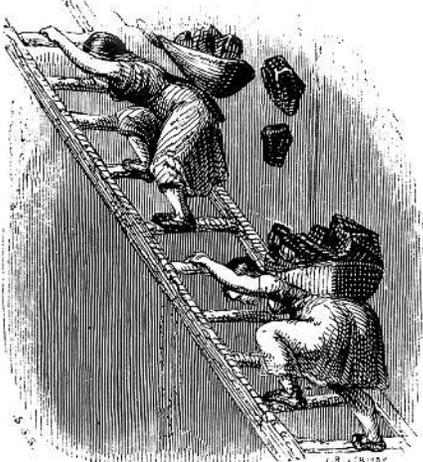
As the development of steam engines allowed for the pumping of water from mines, these mines became much deeper and more hazardous for workers. Problems included:

- not enough ventilation
- the presence of explosive gases
- the need to pull the coal greater distances to the surface.

The lack of ventilation could lead to miners breathing in poisonous gases or coal dust, both of which could lead to serious lung disease. Other gases were likely to explode when exposed to the flame of a miner's lamp, causing death through cave-ins of shafts and tunnels.

In the early days of deep-pit mining, coal was mined and brought to the surface using human muscle rather than machinery. Entire families were often employed in coalmines. Typically fathers and sons would cut the coal with picks, while mothers and daughters carried the coal to the surface. Whatever the job, it was exhausting and usually hazardous.

TABLE 1 Artists' depictions of work in the coalmines

Work in the coalmines	Description
	<p>Coalmines were dark, dangerous places, where miners were exposed to many risks.</p>
	<p>In the early days of deep-pit mining, human muscle was used to 'hurry' carts of coal through narrow passages, as shown in this nineteenth-century artwork.</p>
	<p>Older girls and women had the hazardous task of hauling baskets of coal up narrow ladders.</p>

SkillBuilder discussion

Analysing

1. Using the images shown in **TABLE 1**, describe the implications of working in a coal mine.
2. How would working in a coal mine compare to working in a factory?

13.9.3 The Mines Commission, 1840–42

In 1840 the British Parliament set up a commission to look into working conditions in the mines. Over the next two years, many mine workers were called to give evidence, telling their personal experiences. As a result of the findings of the commission, Parliament passed the *Mines Act 1842*. This changed the law to prevent all girls and women, and boys under 10, from working underground in the mines.



SOURCE 5 Testimony of Isabel Wilson, aged 38, before the 1842 Mines Commission

I have been married 19 years and have had 10 [children]; seven are [alive]. When [I worked in the mines] I was a carrier of coals, which caused me to miscarry five times from the strains, and was [very] ill after each ... [My] last child was born on Saturday morning, and I was at work on the Friday night. Once I met with an accident; a coal broke my cheek-bone, which kept me idle some weeks. I have [worked] below 30 years, and so has my husband; he is getting touched in the breath now.

SOURCE 6 Testimony of Jane Johnson, aged 26, before the 1842 Mines Commission

I could carry 2 hundredweight [just over 100 kilograms!] when 15 years of age but I now feel the weakness upon me from the strains. I have been married near 10 years and had 4 children; have usually (worked) till within one or two days of the children's birth. Many women lose their strength early from overwork and get injured in their backs and legs; was crushed by a stone some time since and forced to lose one of my fingers.

SOURCE 7 Testimony of Agnes Kerr, aged 15, before the 1842 Mines Commission

... [I] make 18 to 20 journeys a-day; a journey to and fro is about 200 to 250 fathom [one fathom equals 1.8 metres]; have to ascend and descend many ladders; can carry 1.5 hundredweight [approximately 76 kilograms]. I do not know how many feet there are in a fathom ...: know the distance from habit; it is sore crushing work; many lassies cry as they bring up the burdens. Accidents frequently happen from the tugs breaking and the loads falling on those behind and the lasses are much (inflicted) with swelled ankles. I cannot say that I like the work well; for I am obliged to do it.

13.9 SkillBuilder activity ANALYSING

If you heard one person make a claim about poor conditions in a workplace you might think they could be exaggerating or overreacting. However, if several people made similar claims over a long period, it might reveal a pattern. It is similar with history. We need to be careful not to take every source at face value, but if similar themes and ideas are repeated it can help build an overall picture of a particular time.

Use **SOURCES 2, 3, 4, 5, 6** and **7** to understand working conditions in factories and mines.

For each source think about the following:

- **Explain** why you think the testimony is believable or not believable.
- Most of these accounts were given before parliamentary committees that were looking into working conditions. Why do you think so many inquiries were made?
- Do you think the conditions could be exaggerated by those who saw them? Why or why not?
- How does hearing many different yet similar accounts help historians understand the past?
- **Decide** what is more reliable: one eyewitness account or several accounts. Why?

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

5, 6, 7, 10

■ LEVEL 3

4, 8, 9

REMEMBER AND UNDERSTAND

- Decide whether the following statements are true or false regarding working conditions in early nineteenth-century textile factories.
 - People typically worked an eight-hour shift.
 - Working conditions were poor with insufficient lighting, poor ventilation and excessive heat.
 - Machinery did not have safety guards.
- Why were children in these factories in particular danger?
 - They were beaten severely for stealing.
 - They moved between and under machinery while it was operating.
 - They had to work long hours just like the adult workers.
 - They were not paid.
- Whole families were often employed in coalmines, including fathers, mothers and children. True or false?
- In addition to mine workers, mine managers and owners would have been called to give evidence before the Mines Commission of 1840–42. **Predict** how their accounts might differ from the workers.
- Describe** the consequences of the Commission's findings.

ANALYSE AND APPLY

- Examine **SOURCE 1** and answer the following.
 - Identify** two examples of the unhealthy nature of the atmosphere in the factory.
 - Identify** two examples of the work carried out by children in the factory.
 - Describe** the method used to drive the machines.
 - Explain** how we know that factory owners were not interested in the safety of their workers.
- Explain** why factory owners would not want their employees to have access to a clock or watch, as indicated in **SOURCE 2**.
- From the images in **TABLE 1**, **identify** and **explain** three possible sources of injury to mine workers.

EVALUATE AND COMMUNICATE

- Did pregnant women receive any special treatment while working in the mines? **Justify** your answer with evidence from **SOURCES 5** and **6**.
- In **SOURCE 5**, Isabel Watson describes her husband as being 'touched in the breath'. **Suggest** what you think she means by this statement.

Answers and sample responses for this topic are available online.

LESSON 13.10 Treatment of the poor and unemployed

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the difficulties faced by the poor and unemployed and how those challenges were addressed.

Tune in

One would hope that in modern society, there are safety nets for those facing financial hardship. While some support existed during the Industrial Revolution, at times, the system seemed more focused on punishing poverty rather than helping people break the cycle.

SOURCE 1 gives some impression of what it might have been like to be facing hardship. It is likely that the ill (perhaps dying) man in the image would have been the main income earner for the family.

SOURCE 1 This nineteenth-century painting shows a family living in poverty. Under the Old Poor Law system the workhouse was an unpleasant place to live, but families could at least stay together.



1. Discuss, using the caption for SOURCE 1, what a workhouse might have been.
2. What do you think the woman by the bed is thinking?
3. What might happen to her children?

13.10.1 The Old Poor Law

Various structures for helping the poor had existed in Britain since the Middle Ages. In the 1830s this system was reformed and relief for the poor was restricted to those who lived in special institutions called **workhouses**.

By the time of the Industrial Revolution, the poor in England were looked after by a system that had been set up in the late sixteenth century. Each village had to take care of its own poor, and those who owned property paid a special tax called the Poor Rate which was used to give food or other necessities for **paupers** living in their own homes. This was called **outdoor relief**.

In some villages, special places called 'workhouses' were built to house and feed the poor. This was called **indoor relief**. They were often very crowded, unpleasant places to live.

13.10.2 The New Poor Law

Following the Swing Riots of 1830 the British government set up a **royal commission** to investigate the operation of the Poor Laws. The commission made the following recommendations:

- Outdoor relief should be abolished.
- Only those living in the workhouses should be entitled to any assistance.
- The workhouse should be as unpleasant as possible to discourage anybody capable of working from wanting to live there.

In 1834 Parliament passed the Poor Law Amendment Act to put these recommendations into effect. This set up a system known as the New Poor Law, and 350 new workhouses were built by 1839. The workhouse system continued into the early twentieth century.



SOURCE 2 From a Rochester correspondent to *The Times*, 26 December 1840

Upwards of half-a-dozen girls in the workhouse, some of them verging on womanhood, have at times had their persons exposed in the most brutal and indecent manner, by the Master, for the purpose of inflicting on them cruel floggings; and the same girls, at other times, have, in a scarcely less indecent manner, been compelled by him to strip the upper parts of their persons naked, to allow him to scourge them with birch rods on their bared shoulders and waists, and which, from more than one of the statements from the lips of the sufferers, appears to have been inflicted without mercy. One girl says, 'My back was marked with blood'.

13.10.3 Life in the workhouse

Conditions in workhouses were deliberately made as unpleasant as possible. Families were split up, men and women were kept separate and their children were removed from their care. Everyone in the workhouse, except for the very youngest children, were put to work. This work usually consisted of hand-grinding corn, breaking stones or **picking oakum**.

Strict rules were enforced on the people in the workhouses, and the person in charge, called the Master, could give severe punishments to anyone who broke the rules. Parents were rarely allowed to see their children and no visitors from outside were permitted. Meals were very basic, just enough to keep people alive, and had to be eaten in silence. In Charles Dickens' *Oliver Twist*, young Oliver asks for more food and is punished by being placed in solitary confinement. Children were given very little education and were usually apprenticed out to local employers at an early age. In Dickens' story, young Oliver Twist was to be apprenticed to a chimney sweep but is eventually apprenticed to an undertaker at the age of nine.

SOURCE 3 This nineteenth-century photograph shows women in a workhouse unpicking short lengths of tar-coated rope — a task known as ‘picking oakum’.



SOURCE 4 Workhouse residents were given a minimal diet and forced to eat in silence, as shown in this nineteenth-century photograph.



13.10.4 The Andover workhouse scandal

A scandal arose in 1845 over conditions in the workhouse in the town of Andover. The Master, Mr McDougal, was a bully and a drunk who savagely beat small children and regularly assaulted women under his care. He had kept rations to such a minimum that starving inmates were found to be trying to eat animal bones they were supposed to be grinding up for fertiliser. The story, published in *The Times* newspaper in London, caused a national outcry.

13.10 SkillBuilder activity

QUESTIONING AND RESEARCHING

The Andover workhouse scandal described in section 13.10.4 seems almost unbelievable. Complete the following to verify the information.

1. Use a search engine like Google Scholar to find at least two articles about the scandal.
2. **Compare** the details in the articles. What facts can you confirm as reliable?
3. Check the sources. Do the authors or institutions have a good reputation?
4. **Discuss** if you now trust the information about the Andover workhouse scandal more after your research.

13.10 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 4, 6

■ LEVEL 2

3, 5, 7, 8

■ LEVEL 3

9, 10

REMEMBER AND UNDERSTAND

1. Who was responsible for looking after the poor in pre-industrial England?
 - A. The village or parish
 - B. The village minister
 - C. The village doctor
 - D. The local manor lord
2. The Poor Rate was a special tax paid by those who owned property to fund poor relief. True or false?
3. **Explain** the difference between indoor relief and outdoor relief.
4. Identify the three main changes brought in with the passing of the New Poor Law.
 - A. Indoor relief was abolished.
 - B. Workhouses were to be made as unpleasant as possible so that no-one who was capable of working would want to live there.
 - C. Workhouses were to be made as pleasant as possible so that anyone would want to live there.
 - D. Outdoor relief was abolished.
 - E. Only those living in the workhouses would be entitled to any assistance.
 - F. Anyone who was poor would be entitled to assistance.
5. **Explain** why there was a deliberate policy to make the workhouse an unpleasant place to live.
6. **Describe** how children were treated in the workhouse.

ANALYSE AND APPLY

7. From what you can identify in **SOURCE 2**, **describe** the methods used to make the workhouse as unpleasant as possible.
8. **Identify** two things that **SOURCES 3** and **4** tells us about life in the workhouse.

EVALUATE AND COMMUNICATE

9. Think about life for the poor under the Old Poor Law and the New Poor Law.
 - A. **Create** a table to compare conditions under each law.
 - B. Do you think life became easier or harder for paupers after 1834? **Justify** your answer.
10. **Explain** what the treatment of paupers under the New Poor Law tells us about attitudes towards poverty in nineteenth-century Britain.

Answers and sample responses for this topic are available online.

LESSON 13.11 Working conditions for children

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the working conditions experienced by children in factories and mines during the Industrial Revolution.

Tune in

In modern Australia, we are fortunate that nearly all children have access to free state school education. This stands in stark contrast to the Industrial Revolution, when many children were forced to work in highly unsafe conditions instead of receiving an education.

SOURCE 1 gives you some idea of what conditions might have been like.

SOURCE 1 A young trapper opening the door for a truck of coal pushed by children



1. What obvious dangers can you see in the image?
2. What might be some unseen dangers?
3. What would it take for you to work in a place like this?

13.11.1 Children in the Industrial Revolution

Before the Industrial Revolution it was normal for children to work to help support their family. In agricultural or house work, children often worked under their parents' supervision, who could decide the type of work their children did. This changed during the early Industrial Revolution. Children working in factories and mines faced harsh and often brutal conditions.

Owners of textile mills could hire children for lower wages than adults. In fact, children often outnumbered adults in factory work. In 1788, it is believed that more than two-thirds of workers in cotton mills in England and Scotland were children. While older children and teenagers could operate spinning or weaving machines, the work done by younger children was the most dangerous.

Piecers and scavengers

Children employed as 'piecers' were required to lean over the spinning machine and repair broken threads. They had to do this while the machine was running, and often had more than one machine to watch. It is estimated that a piecer looking after a number of machines could walk as much as 30 kilometres a day. Other children were employed as 'scavengers'. They had to crawl under machines collecting loose cotton and other waste. This task, also performed while machines were running, was particularly dangerous.



SOURCE 2 From *A Narrative of William Dodd, A Factory Cripple*, 1841

At the age of six I became a piecer ... each piecing requires three or four rubs, over a space of three or four inches; and the continual friction of the hand in rubbing the piecing upon the coarse wrapper wears off the skin, and causes the finger to bleed. The position in which the piecer stands to his work is with the right foot forward, and his right side facing the frame. In this position he continues during the day, with his hands, feet, and eyes constantly in motion ... the chief weight of his body rests upon his right knee, which is almost always the first joint to give way ... my evenings were spent in preparing for the following day — in rubbing my knees, ankles, elbows, and wrists with oil, etc. I went to bed, to cry myself to sleep.

SkillBuilder discussion

Analysing

1. Based on **SOURCE 2**, what were some of the physical effects of working as a piecer in a factory during the Industrial Revolution?
2. Read **SOURCE 3**. How does the little girl's job as a scavenger show the dangers of child labour?
3. Discuss what these sources reveal about child working conditions in the Industrial Revolution.



SOURCE 3 From F. Trollope, *Michael Armstrong, the Factory Boy*, 1840

A little girl about seven years old, whose job as scavenger was to collect incessantly from the factory floor, the flying fragments of cotton that might impede the work ... while the hissing machinery passed over her, and when this is skilfully done, and the head, body, and the outstretched limbs carefully glued to the floor, the steady moving, but threatening mass, may pass and repass over the dizzy head and trembling body without touching it. But accidents frequently occur; and many are the flaxen locks, rudely torn from infant heads, in the process.

13.11.2 Children in the mines

Children in coalmines were employed as 'hurriers' and 'trappers'. Hurriers were required to carry baskets or tow trucks of coal to the surface. Girls as young as six or seven could be employed in this way, and would continue this work into their teens. The belt or chain around a girl's waist could damage the pelvic bones, and many women who worked in the mines as children later died in childbirth.

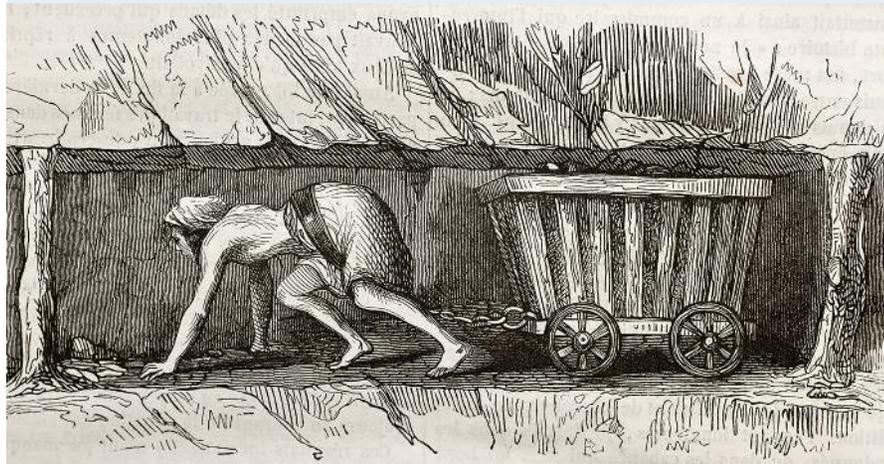
Children as young as four or five were employed as trappers. Their job was to open and close the ventilation doors in the underground tunnels to allow the hurriers pulling their carts to pass through; they often sat in the dark for up to 14 hours a day.

SkillBuilder discussion

Communicating and reflecting

Child labour is still a reality in many parts of the world today. In small groups, discuss what might be done to solve this issue. From your discussion, come up with three possible solutions.

SOURCE 4 This sketch of a young person pulling a truck full of coal was created c. 1842.



13.11.3 The 'climbing boys'

Another occupation that employed large numbers of children, some as young as six, was that of chimney sweep. A sweep would employ a number of young boys, known as 'climbing boys', to climb up into chimneys and clean them with a hand brush or metal scraper. It was a dangerous and dirty job. Many choked to death from breathing in the dust and soot, while others were injured by falling or by becoming stuck in narrow chimneys.

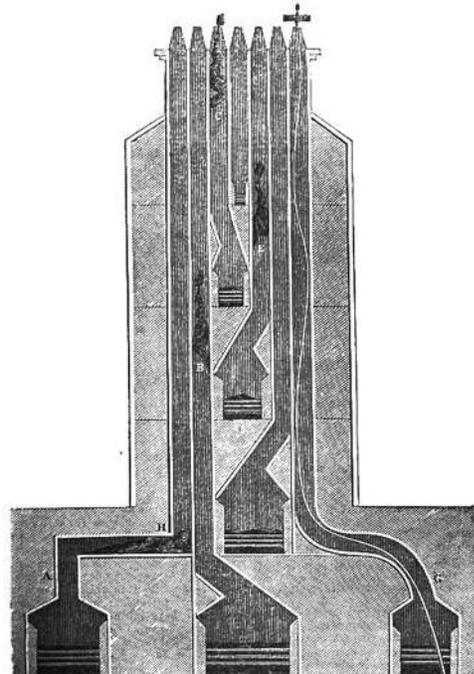
SOURCE 5 A young chimney sweep stands before the fire grate. 1864 illustration for *London Labour and the London Poor*, book by Henry Mayhew.



SOURCE 6 An 1834 publication showcasing the advantages of mechanical chimney-sweeping. The letters indicate the areas and ways in which a 'climbing boy' could be stuck.

Mechanics' Magazine.
MUSEUM, REGISTER, JOURNAL, AND GAZETTE.
No. 582. SATURDAY, OCTOBER 4, 1834. Price 3d.

THE CONTRAST—MECHANICAL & CHILDREN CHIMNEY-SWEEPING.



13.11.4 Was anything done to protect children?

It may seem that the exploitation of children during the Industrial Revolution went on with no intervention, but that is not entirely true. Lawmakers did try to help children during the Industrial Revolution. To address the issue of 'climbing boys' the British Parliament passed laws in 1788, 1834, 1840 and 1864 to control the employment of chimney sweeps. However, many of these laws were ignored and difficult to enforce.

The Factory Acts were a series of laws passed in Britain during the nineteenth century to improve working conditions, particularly for children and women. These acts gradually reduced working hours, set minimum age limits, and introduced safety regulations in factories.

Key Factory Acts include:

- *Factory Act 1833*: Banned children under the age of nine from working in textile factories, limited work hours for older children, and introduced factory inspectors.
- *Factory Act 1844*: Set maximum working hours for women and children, improved safety measures.
- *Factory Act 1847 (Ten Hours Act)*: Limited working hours for women and children to 10 hours a day.
- *Factory Act 1878*: Applied regulations to all factories and raised the minimum working age to ten.

Despite these laws, enforcement was weak at first, and child labour remained common until stricter regulations and inspections were introduced later in the century.

13.11 SkillBuilder activity ANALYSING

Working with a partner, complete the following tasks.

1. **Outline** what the attitudes of each of the following individuals might have been towards child labour in the 1830s:
 - a. a factory or mine owner
 - b. working-class parents of young children
 - c. working-class children
 - d. members of Parliament in favour of reform to factory and mine working conditions.
2. Why do you think early Factory Acts only reduced rather than abolished child labour? **Explain** your view.

13.11 Exercise

learnon

Learning pathways

■ LEVEL 1

1, 2, 3, 5

■ LEVEL 2

4, 6, 7

■ LEVEL 3

8, 9, 10

REMEMBER AND UNDERSTAND

1. Why was the employment of children so attractive to the owners of textile factories?
 - A. Children were more obedient, so they worked better.
 - B. It helped lower costs: all the family members worked together and were therefore more content, which increased their productivity.
 - C. It raised costs through cheap labour.
 - D. It lowered costs through cheap labour.
2. Identify the roles of children in textile factories and coalmines.
 - a. _____ were children who had to repair broken threads on the machines.
 - b. _____ were children who crawled under the machines gathering up loose cotton and other waste.
 - c. _____ carried heavy baskets or towed trucks of coal to the surface.
 - d. _____ opened and shut ventilation doors as the carts were pulled through the underground tunnels.

3. What were the risks faced by young girls employed as hurriers in coalmines?
 - A. They got lung disease from the gases.
 - B. Damage to their backs. Later in life they often suffered from arthritis.
 - C. Damage to their pelvic bones. Later in life many of them died in childbirth as a result of this injury.
 - D. Their limbs were crushed.
4. What hazards faced by climbing boys can you see in **SOURCE 6**?

ANALYSE AND APPLY

5. From **SOURCE 2**, **identify** the main types of injuries that could be suffered by piecers in a textile factory.
6. Using **SOURCE 3**, **explain** why the job of scavenger in a textile factory was so dangerous.
7. The artists who drew **SOURCES 1** and **4** were attempting to present the negative side of child labour in coal mines. **Explain** how each artist has achieved this in their drawings.
8. **Describe** what impression the artist was trying to create in **SOURCE 5**. **Explain** how this has been achieved.
9. The drawings in **SOURCES 1** and **4** were originally published in the report of the Parliamentary Mines Commission in 1842. **Consider** why the Commission would have included drawings of this type in its official report.

EVALUATE AND COMMUNICATE

10. In rural communities children had helped with many different tasks, so children working was not new. **Explain** why child labour became more of a problem during the Industrial Revolution.

Answers and sample responses for this topic are available online.

LESSON 13.12 Social unrest, protests and riots

LEARNING INTENTION

By the end of this lesson you should be able to **explain** why protests about working conditions occurred and how they evolved into organised movements.

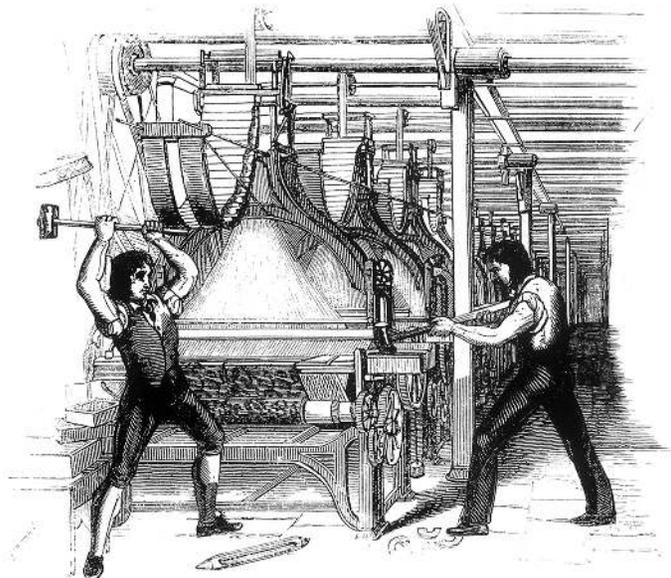
Tune in

Around the world today, a key feature of democracy is the right to belong to a union. Unions engage in collective actions for workers, including negotiating pay and conditions. This has not always been the case and, in fact, some convicts were transported to Australia because they tried to form unions. There were also incidents of violence similar to the violence that occurred during the Swing Riots.

SOURCE 1 shows one such example of violence against machinery that had taken over the work people had previously done.

1. **Discuss the reasons for the men in the image taking part in this type of protest.**
2. **How effective do you think it would be?**

SOURCE 1 This nineteenth-century artwork depicts Luddites smashing power looms in a cotton mill.



13.12.1 Social unrest, protests and riots

As the industrial and agricultural revolutions progressed, many factory, mine and farm workers were unhappy with their working conditions. In the beginning this was shown through protests and even riots, but later in the nineteenth century workers began to organise into unions to work towards improvements in their working lives.

The changes in farming and industry caused many problems for normal working people. This led to various protest movements in the early nineteenth century. These are summarised in **TABLE 1**.

TABLE 1 Examples of work reform protests and movements that took place during the Industrial Revolution

Event	Year/s	Description	Outcome
Luddites	1811–1817	Skilled artisans destroyed industrial machines.	14 executed, many transported to colonies
Peterloo Massacre	1819	50 000 protesters gathered peacefully at St Peter's Fields near Manchester to demand economic and political reform. They were attacked by mounted troops.	15 were killed and more than 600 seriously wounded
Matchgirls' Strike	1888	Poor wages and exposure to toxic white phosphorus led to severe health issues like 'phossy jaw'. 1400 women and girls walked out in protest, gaining support from journalists and activists.	Bryant & May match factory improved wages and conditions, raising awareness about industrial health hazards.
London Dock Strike	1889	Dockworkers protested low wages, poor conditions, and job insecurity. Over 10 000 workers went on strike, supported by trade unions and the public.	Workers secured a pay increase and better conditions, strengthening trade union power.

SkillBuilder discussion

Analysing

- Describe what is being shown in the cartoon in **SOURCE 2**.
- What do you think the officer means when he calls 'Remember, the more you kill, the less Poor Rates you'll have to pay, so go to it, lads, show your courage and your loyalty!'?

SOURCE 2 An 1819 cartoon depicting the Peterloo Massacre. The officer is calling to his men: 'Remember, the more you kill, the less Poor Rates you'll have to pay, so go to it, lads, show your courage and your loyalty!'



13.12.2 Trade unions

Trade unions began as groups of workers in similar trades but grew bigger with the rise of factories. Factory employers resisted unions advocating for better wages and conditions, leading Parliament to pass laws limiting union activities.

The Combination Acts

In 1799 and 1800 Parliament passed the Combination Acts, which effectively banned workers from combining to form unions. The Combination Acts were **repealed** in 1824, but a series of **strikes** led to the passing of the Combination Act of 1825. This allowed unions to bargain with employers over wages and hours of work, but banned them from using strike action.

The Chartists

In the past, voting rights in Britain were limited to men with substantial property, excluding most men and all women. After the **Napoleonic Wars**, people started to push for more democratic voting rights. The Reform Act of 1832 reduced property value requirements for voters and allowed certain tenant farmers to vote, but many felt this was not enough. The Poor Law Amendment Act of 1834 made people even more unhappy because it seemed unfair to those who could not vote. In 1836, the London Working Men's Association was formed by tradesmen like William Lovett and Henry Hetherington who wanted working-class rights and universal male **suffrage**.

In 1838 the association published its People's Charter, which set out six aims. These were:

1. the vote for all men over the age of 21
2. secret ballot at elections
3. no property qualification for members of parliament
4. payment of members of parliament, so that standing for parliament was not restricted to the rich
5. equal-sized electorates, so that each vote had equal value
6. annual elections for parliament.

Supporters of the People's Charter became known as Chartists. A number of large public meetings were then held in of England, Wales and Scotland. These meetings were attended by many thousands of working-class people.

In 1839, the Chartists submitted a petition signed by 1.3 million workers, but Parliament refused to consider it. This led to protest marches across the country, sometimes facing armed troops. Several Chartist leaders, including Lovett, were arrested and Lovett was imprisoned for a year. In 1842, many workers went on strike for better wages and the principles of the People's Charter. This resulted in numerous arrests and over 50 Chartists being sent to Australian colonies. Eventually, all but one of the charter's aims — annual elections — were adopted in Britain, influencing democratic governments worldwide.

Did you know?

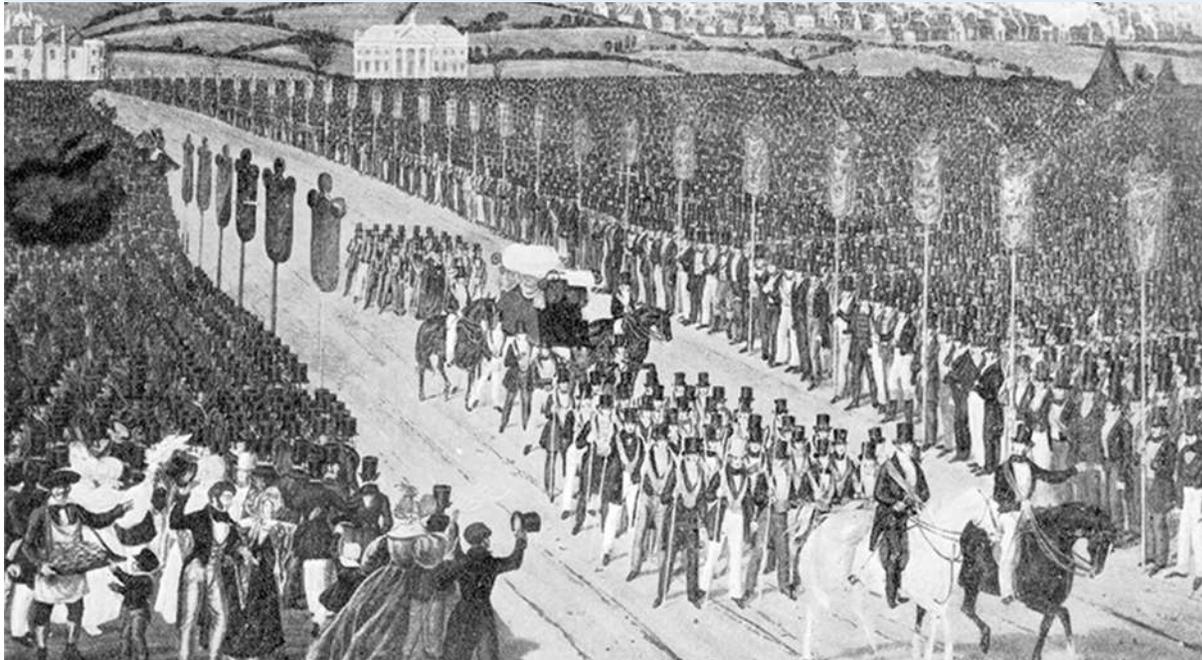
The spirit of British Chartism crossed the world to spark rebellion in the Australian goldfields. The famous Eureka Rebellion in Ballarat, 1854, was led by former British Chartists who brought their fight for democratic rights from Britain to the gold mines. The miners' demands echoed the same calls for justice that had rung out across Britain — proving that the fight for fairness knew no borders!

The Tolpuddle Martyrs

In 1834, six farm labourers in the village of Tolpuddle in Dorset were arrested for swearing an oath of loyalty to their union, the Friendly Society of Agricultural Labourers. It was no longer illegal to belong to a union, so they were prosecuted under an obscure law relating to the swearing of oaths. They were sentenced to seven years' transportation to Van Diemen's Land. Outraged public opinion and

the presentation of a huge petition to Parliament led to their being pardoned in 1836. They became an important symbol of the right of free association for workers.

SOURCE 3 More than 50 000 trade union members gathered on 21 April 1834 in Copenhagen Fields (outside London) to present a petition to the Prime Minister in support of the Tolpuddle Martyrs.



The New Model Trade Unions

In the 1850s groups of skilled tradesmen set up their own unions, beginning with the Amalgamated Society of Engineers in 1851. These unions gave members a wide range of services, such as sickness benefits. They gained strong support and soon became a model for other worker groups. Made up largely of skilled tradesmen, these unions were quite conservative and concentrated on negotiation with employers, rather than strike action. This helped make unions more ‘respectable’ in the eyes of many.

Improved legal status

In response to the growth of unions, in 1867 Parliament set up a royal commission to investigate trade unions. The commission found that most ‘new model’ unions served a useful social purpose and should have legal status. The Trade Union Act of 1871 gave unions many of the same legal rights as businesses, including the right to own property. In 1875, unions in Britain gained the legal right to bargain on behalf of their members, including the right to strike.

The Women’s Protective and Provident League

In 1874 Emma Paterson, after her involvement in men’s union work, formed the first women’s union, the Women’s Protective and Provident League. It focused on traditionally female trades including book binding and tailoring and worked to improve pay and conditions for women working in factories. She worked towards improving conditions right up until her death in 1886, aged 38.

One of the most notable strike actions occurred in 1888 at the Bryant and May match factory. The working conditions were terrible, with workers facing health risks from white phosphorus used in match making. The strike started because three workers were fired for supposedly talking to a social reformer. In response, 200 workers left in protest. After two weeks, the strike ended when the fired workers were reinstated and other demands were met. As a result, the Union of Women Match Workers was formed.

13.12 SkillBuilder activity

COMMUNICATING AND REFLECTING

The term 'Luddite' is still used today, but has it evolved from its original meaning?

Investigate what the term means today. Is it meant as a compliment or an insult? Under what circumstances might it be used?

Discuss in pairs or small groups whether you think the term is appropriate in a modern setting. Has it changed or stayed the same?

13.12 Exercise

learn**on**

Learning pathways

■ LEVEL 1

1, 2, 3, 6

■ LEVEL 2

5, 7, 8

■ LEVEL 3

4, 9, 10

REMEMBER AND UNDERSTAND

1. The Peterloo Massacre had no effect on attitudes to social problems that had arisen from the Industrial Revolution. True or false?
2. **Describe** why factory owners were opposed to the formation of unions.
3. What was the purpose of the Combination Acts?
 - A. To allow the combination of worker and employer unions
 - B. To prevent workers from using combine harvesters
 - C. To prevent workers from combining to form unions
 - D. To allow for workhouses to be combined with factories
4. **Explain** the issues that led to the formation of the London Working Men's Association.
5.
 - a. **Outline** the demands included in the People's Charter of 1838.
 - b. From which group did the main support for the charter come?
 - A. Middle class
 - B. Aristocracy
 - C. The clergy
 - D. Working class
6. **Summarise** the response of the British government at the time to the demands of the Chartists.
7. **Explain** how trade unions had become an accepted part of society by 1875.

ANALYSE AND APPLY

8. **Identify** three features of **SOURCE 2** that suggest to us that the artist was opposed to the actions taken by the troops in the Peterloo Massacre.
9. Consider **SOURCE 3**.
 - a. What does it tell us about the nature of the protest against the Tolpuddle Martyrs' punishment?
 - b. **Consider** why an artist would regard the Tolpuddle Martyrs' protest as an important event to document.

EVALUATE AND COMMUNICATE

10. To what extent do you believe that the development of the People's Charter in 1838 was a major turning point in both British and Australian history? **Explain** your answer.

Answers and sample responses for this topic are available online.

LEARNING INTENTION

By the end of this lesson you should be able to give an overview of the slave trade in the eighteenth and nineteenth centuries, and draw conclusions about the impact of the cotton industry on slavery.

Tune in

In 1787 Thomas Clarkson formed the Society for the **Abolition** of the Slave Trade, fifteen years after the Mansfield Judgement declared slavery illegal in England. However, it would be 75 years before slavery was finally ended in the United States.

1. What do you think is the meaning of the phrase 'Am I not a man and a brother?' in SOURCE 1?
2. What do you think of when you hear the word 'slavery'?
3. Abolition with regard to slavery, meant the ending of legal slavery. Do you think slavery has been abolished completely around the world in the modern world?

SOURCE 1 The emblem of the Society for the Abolition of the Slave Trade

**13.13.1 The origins of the slave trade**

Slavery has existed for thousands of years across various civilisations. With the arrival of Europeans in the Americas in the late fifteenth century, the slave trade became **intercontinental**. Over 400 years, millions of Africans were transported to support the economies of America and Europe. While slavery built wealth for many, the slaves themselves gained nothing.

Christopher Columbus saw potential wealth in the New World upon reaching Hispaniola in 1492. Spanish settlers needed many workers, leading to the enslavement or death of many Native Americans. Slaves worked in goldmines under harsh conditions, facing long hours and disease, which led to high mortality rates. African slaves, who had some resistance to European diseases, replaced them.

The English established plantations in the Caribbean and America, growing sugar, cotton and tobacco. They imported African slaves as the native populations dwindled due to disease and overwork, making African slaves crucial to the American economy.

SOURCE 2 shows the importance placed on slavery by one English plantation owner. Some European labourers and convicts were put to work, but in general, European servants were hard to find. Most had come to America to work for themselves, not for someone else. Soon African slaves became household servants as well as manual labourers.

SOURCE 2 Emanuel Downing, a plantation owner from Massachusetts, 1645

I do not see how we can thrive until we get a stock of slaves sufficient to do all our business.

13.13.2 Kidnapped and traded

Early European slave traders raided the African coast and kidnapped any able-bodied Africans they could capture. Sometimes they tempted their victims close to the ships with displays of brightly coloured cloth or decorated beads. Later they developed trading arrangements with African tribal chiefs who raided weaker tribes in the interior and brought the slaves they captured to the coastal depots set up by European slavers. Here slaves would be held until there were enough to fill a slave ship. Once sold, slaves were branded with a red-hot iron to indicate who had bought them. Europeans established coastal forts to protect the valuable trade.

SOURCE 3 Gathering of slaves in Africa, before transportation, created in 1845



13.13.3 The Middle Passage

The Atlantic slave trade, or Triangular Trade, involved ships leaving Europe with goods to sell in West Africa. In exchange for these goods, they loaded their ships with slaves for the Middle Passage across the Atlantic to the Americas, where conditions were horrific and approximately 1.8 million died. The final leg saw ships filled with raw materials like sugar, cotton and tobacco, which were sold in Europe for profit.

SkillBuilder discussion

Questioning and researching

1. Study **SOURCE 4**. Explain why the Atlantic slave trade was called the Triangular Trade?
2. Discuss the main factors influencing the Triangular Trade.

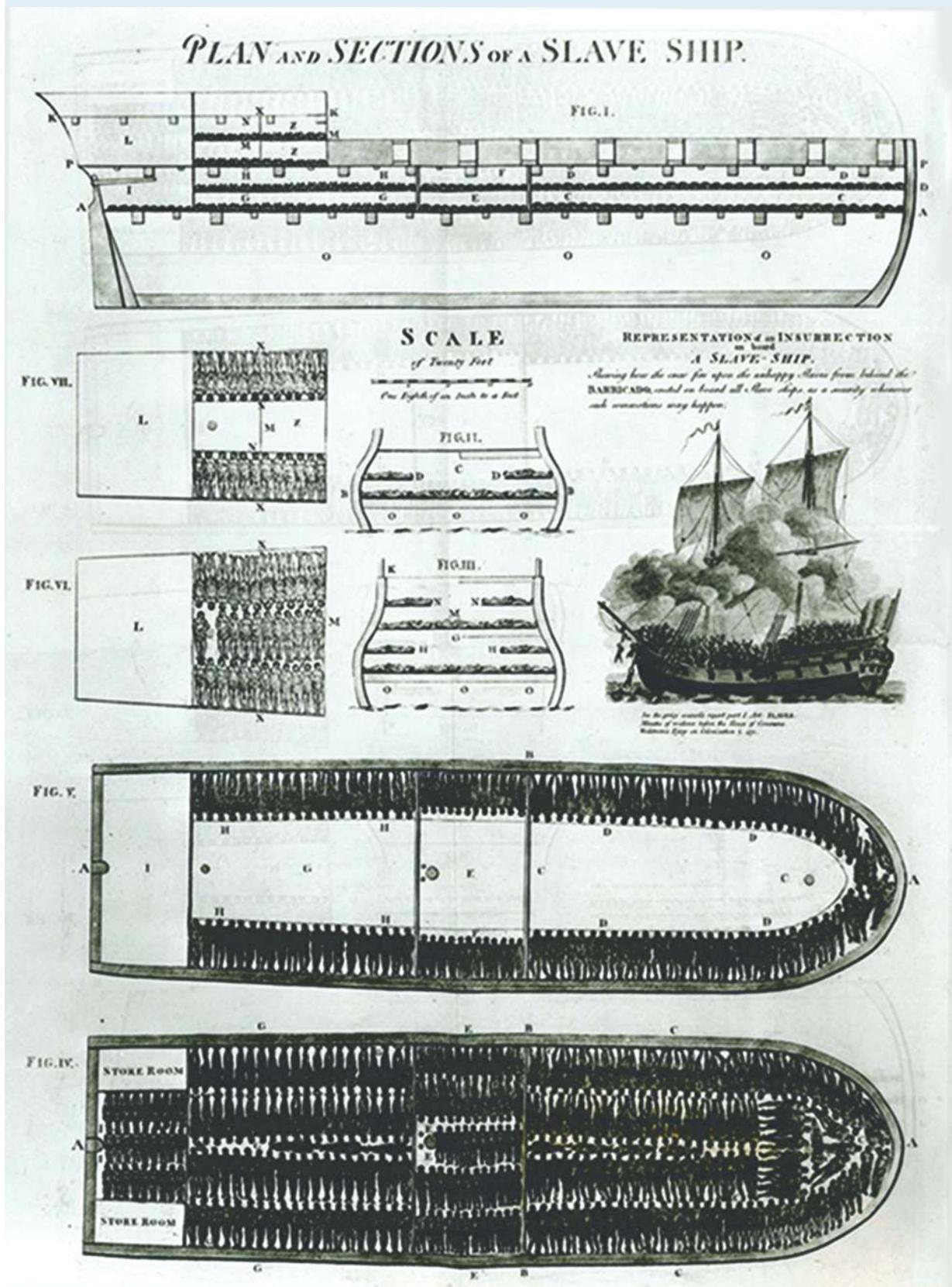


SOURCE 4 This map shows the route the slave ships took in the Triangular Trade.



Source: Map drawn by Spatial Vision.

SOURCE 5 This plan of a slave ship from 1789 shows how tightly packed the slaves were.

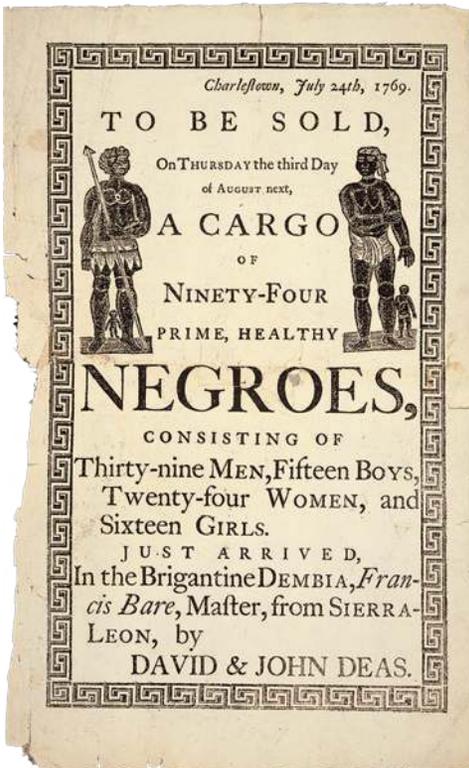


13.13.4 Sold

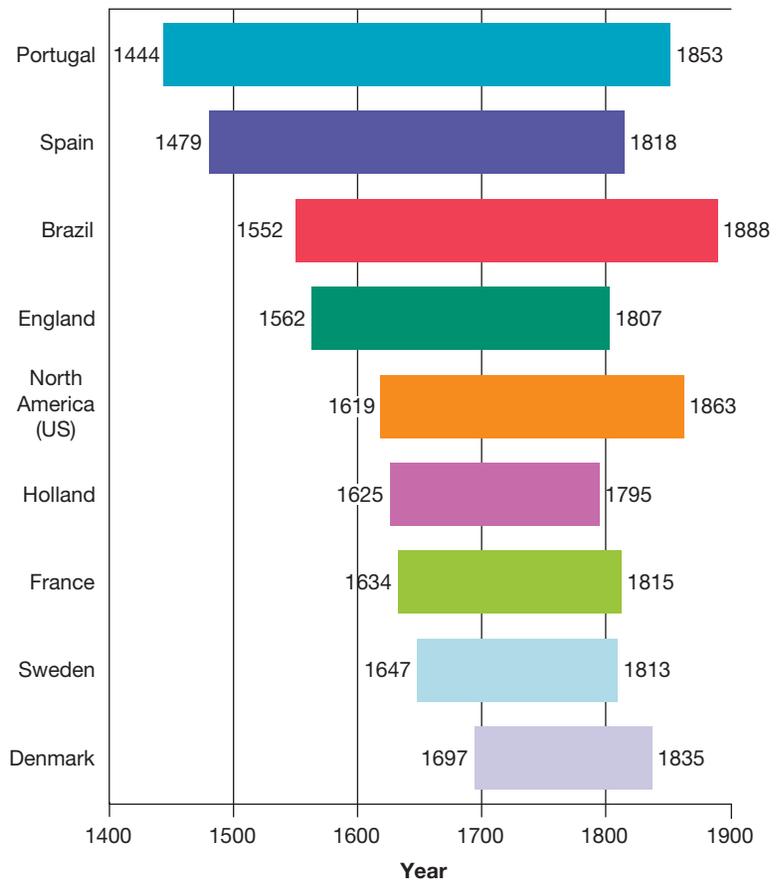
As slave ships arrived at ports in the Caribbean and along the coast of North America, plantation owners would gather to make their purchases. Posters like the one shown in **SOURCE 6** advertised upcoming ship arrivals, listing the number of slaves available and their state of health. There were generally two ways in which a slave sale would take place. The first, referred to as a ‘scramble’, must have been particularly terrifying for the slaves. Upon arrival in port the slaves were herded together either on the deck of the ship or in a nearby auction yard. Buyers paid a fixed amount before the sale and at a given signal rushed at the slaves, grabbing as many as they could. In the process families would often be separated, husbands from wives, parents from children.



SOURCE 6 A poster advertising an upcoming slave sale



SOURCE 7 A chart showing the approximate time that different countries became engaged in the slave trade



SkillBuilder discussion

Analysing

1. What does the language and imagery in **SOURCE 6** reveal about attitudes toward slavery at the time?
2. How might different people in society—such as an enslaved person, an abolitionist, or a slave owner—have reacted to this poster?

The other type of sale took place at an auction at which individual slaves were sold to the highest bidder (see **SOURCE 8**). Slaves were made to stand on a raised platform so they could be inspected by prospective owners. Their teeth would be examined to check their health. Signs of beatings could lower the price because they suggested a poor worker or potential escapee. In reality, scars were more likely to be a sign of violent abuse than of insolence. Sometimes unscrupulous doctors would buy weak or sick slaves in the hope of strengthening them and selling them on for a profit.

During the entire ordeal the slaves themselves knew nothing of what was going to happen to them. Once sold, they were often given a new name and branded a second time by their new owner before being sent to work.

SOURCE 8 (a) This painting by German artist Friedrich Schulz illustrates a slave auction in the southern states of the United States. **(b)** 'Price, Birch & Co., dealers in slaves' — A slave auction house, Virginia c. 1860.



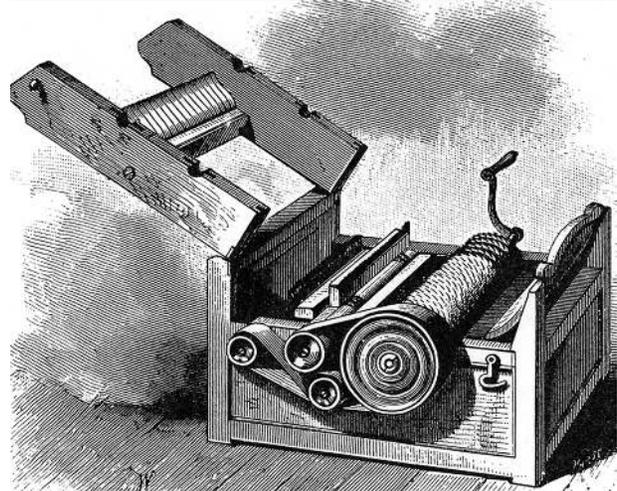
13.13.5 'King Cotton'

The Industrial Revolution improved many people's lives by making goods cheaper and more available. However, it also brought hard labour for others. In Britain, machines helped the textile industry grow, increasing the demand for cotton. At first, cotton came from India, but soon Britain needed more than India could supply. So, they turned to the southern United States, where the climate and soil were perfect for growing cotton, but the work was grueling. Eli Whitney invented the cotton gin in 1793, which made it easier to separate seeds from the cotton. This allowed enslaved people to process over 20 kg of cotton each day, instead of just half a kilogram.

Whitney's invention greatly changed how cotton was processed in America. It made the job easier, but it also led to needing more workers because production increased. Cotton soon became a key part of the economy in the southern United States, more important than tobacco and sugar. The southern states produced 75 per cent of the world's cotton.

'King Cotton' was a term used by southern politicians to show how important it was to the economy. Between 1820 and 1860, cotton production grew seventeen times, and the number of enslaved people increased by 250 per cent, even though there were high death rates among babies. Only about one quarter of southern farmers owned slaves, but slavery was crucial to the South's economy, making it rare for people to oppose it. Slavery was officially ended in the United States when Abraham Lincoln signed the Emancipation Proclamation in July 1863. However, different forms of forced labour continued for many years after.

SOURCE 9 Eli Whitney's cotton gin



13.13.6 Life on the plantation

Of every 100 slaves taken captive in Africa, about 25 died before being put to work. Another third of those who survived long enough to reach a plantation died within two years. The survivors experienced the process called 'seasoning' during which they learned their roles and grew to fear the slave drivers. Punishment for wrongdoing was harsh. For any sign of resistance to cruel treatment or for working too slowly, slaves were lashed or made to walk a **treadwheel**. The other slaves were often forced to watch the punishments, which were meant to be a deterrent. **SOURCE 10** recalls one instance of a slave being punished.



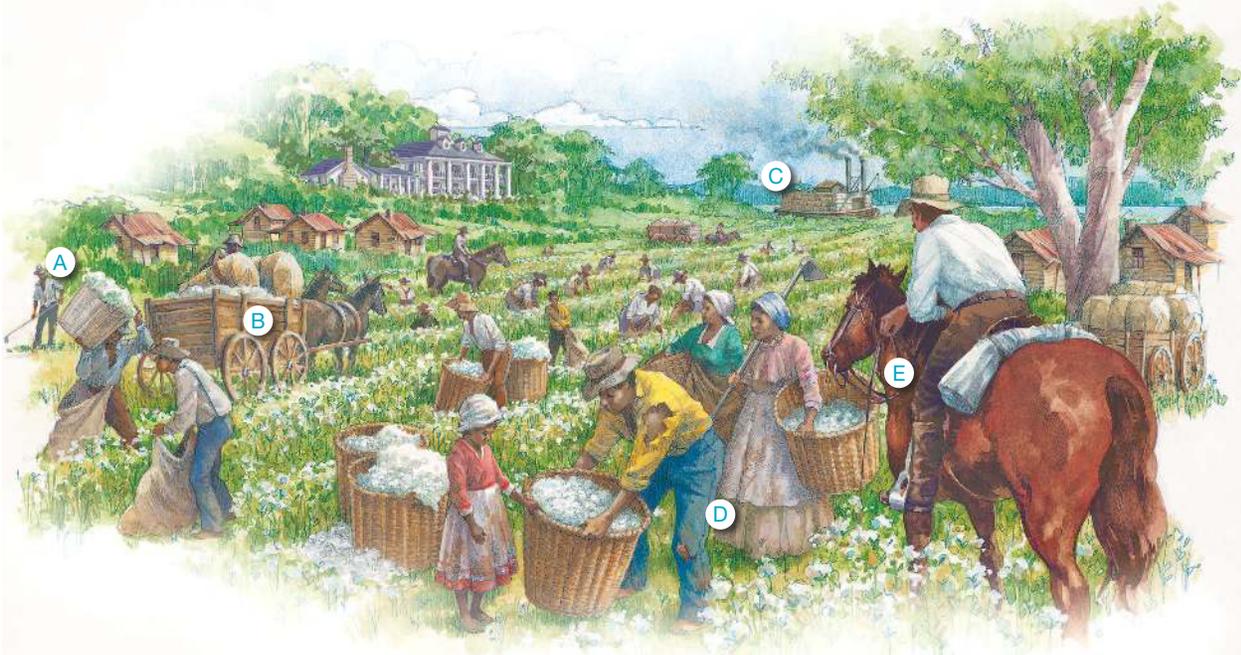
SOURCE 10 Description of a flogging from C. Bull, *Slavery in the United States*, 1836

I had often seen black men whipped, and had always, when the lash was applied with great severity, heard the sufferer cry out and beg for mercy — but in this case, the pain inflicted was so intense, that Billy never uttered so much as a groan. The blood flowed from the commencement, and in a few minutes lay in small puddles at the root of the tree. I saw flakes of flesh as long as my finger. When the whole five hundred lashes had been counted the half dead body was unbound and laid in the shade of the tree upon which I sat.

The living quarters of enslaved people were very simple. Sometimes the plantation owner would provide basic quarters, but often the slaves would have to build their own. There was little furniture and beds were simply straw or rags on the ground. Slaves who worked as house servants usually had better quarters and food than those who worked in the fields.



SOURCE 11 A modern artist's reconstruction of a typical cotton plantation



- A** Slaves often had to build their own small quarters.
- B** Baled cotton was transported on carts.
- C** Cotton was also transported on barges.
- D** Labour on a cotton plantation was back-breaking.
- E** Slave drivers oversaw work on the plantation.

13.13 SkillBuilder activity QUESTIONING AND RESEARCHING

1. Form into small groups and assign one of the following people to each group member: Frederick Douglas, Harriet Beecher Stowe, John Newton, Nat Turner, John Brown, Harriet Tubman.
2. Once assigned, **conduct research** into their role in the ending of slavery. In particular, see if you can **identify** whether the individual was recognised as important at the time, or if they were only considered so later. This table could be useful for your group to visualise your findings:

Individual	Recognised importance at the time	
	Give a rating out of 5, from 1 = not recognised, to 5 = considered highly important	Recognised importance over time since their lifetime
	Explain your score	

Learning pathways

■ LEVEL 1

1, 2, 3

■ LEVEL 2

5, 6, 7

■ LEVEL 3

4, 8, 9, 10

REMEMBER AND UNDERSTAND

1. The two types of slave sale that took place were an auction and a scramble. True or false?
2. Select three reasons that explain why it is difficult to gain accurate figures of the numbers of slaves bought and sold in the slave trade.
 - A. Many slaves died during the journey and were buried at sea.
 - B. The slave traders wanted to keep it a secret.
 - C. The record keeping was inaccurate.
 - D. Slave traders could not count.
3. Identify the attitude towards slavery of the plantation owner in **SOURCE 2**.
 - A. Slaves are no use to him at all.
 - B. Slaves deserve their fate
 - C. Slavery is evil
 - D. Slaves are a commodity to help him run his business
4. Specify and **explain** the causes of the Triangular Trade, indicating clearly why people from Africa were transported across the Atlantic Ocean.

ANALYSE AND APPLY

5. **Explain** why slavery became a vital part of the American economy.
6. **Describe** how slave traders took advantage of rivalry between different African tribes.
7. **Outline** why slaves were branded after they were bought.
8. **Identify** why the African slave trade was referred to as the Triangular Trade.

EVALUATE AND COMMUNICATE

9. **Explain** what **SOURCE 5** suggests about the way slaves were regarded by the slave traders.
10. **Examine SOURCES 5, 6 and 8** to **write** a summary paragraph of the experience of an enslaved person from living in freedom to being sold at a slave market. Refer to specific aspects of the sources as you go.

Answers and sample responses for this topic are available online.

LESSON 13.14 New ideas for society

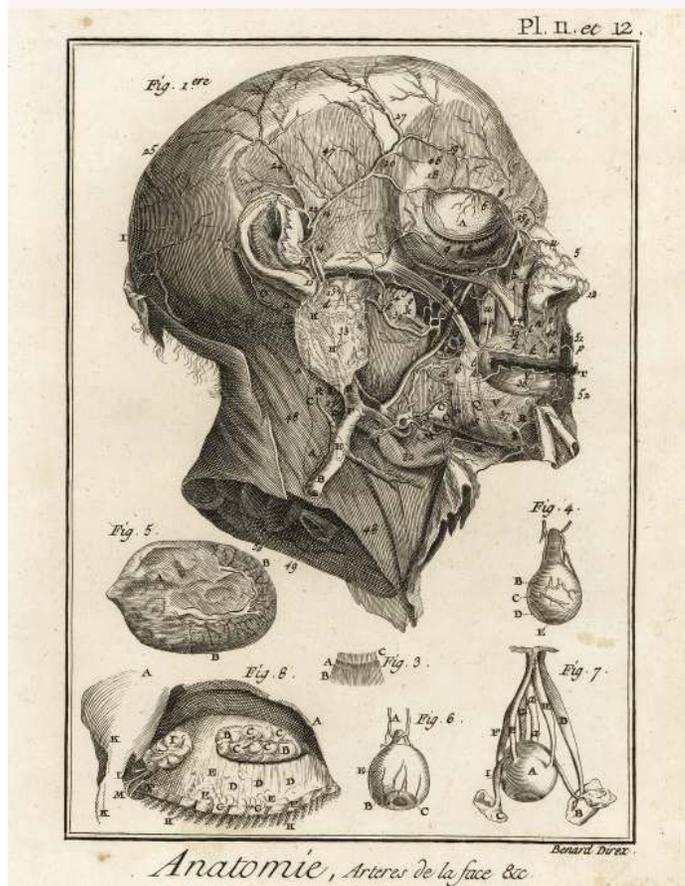
LEARNING INTENTION

By the end of this lesson you should be able to **describe** the key ideas in science, economics, politics and national identity that emerged during the Industrial Revolution.

Tune in

SOURCE 1 shows an illustration of facial anatomy from the first Encyclopedia, compiled by Denis Diderot in the late 1700s. It was a hugely significant work covering all aspects of life, from anatomy to music, from economic theory to farm practices.

SOURCE 1 An illustration showing studies of anatomy



1. What new approach can you see in the illustration?
2. What does it say about the emerging ideas of the time?

13.14.1 Economic ideas

The seventeenth and eighteenth centuries were important times for new ideas in Britain and Europe. During the seventeenth century, the Scientific Revolution brought advancements in subjects like physics, mathematics, chemistry and biology. Instead of just relying on religious explanations, scientists started to use experiments and observations to understand the world. In the eighteenth century, the Enlightenment period questioned old beliefs about society and the role of religion, promoting the idea that everyone should have equal rights, no matter their social status. This questioning of old ideas continued into the nineteenth century, leading to new thoughts about how the economy should work, moving away from the old feudal system still present in much of Europe.

TABLE 1 The main new ideas in economics that emerged during the Industrial Revolution

Concept	Key ideas	Notable figures	Historical context
Capitalism	Wealth creation through entrepreneurship, minimal regulation, open market competition	Adam Smith	Late eighteenth century, dominated Britain, Europe and the US by late nineteenth century
Socialism	Economic and political equality, collective or state ownership of enterprises	Robert Owen, Karl Marx	Nineteenth century, response to Industrial Revolution, predicted revolutions in Europe
Imperialism	Expansion of European empires, control of foreign resources	Heavy links with capitalist thinkers and leaders such as Theodore Roosevelt and Queen Victoria.	Eighteenth and nineteenth centuries, accelerated industrial growth, European expansion into Africa

SOURCE 2 Adam Smith, *The Wealth of Nations*, 1776

By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.

SOURCE 3 Karl Marx and Friedrich Engels, *The Communist Manifesto*, 1848. What did Marx think would ultimately happen in industrialised European nations?

Society as a whole is more and more splitting up into two great hostile camps, into two great classes directly facing each other — the bourgeoisie and proletariat ... The Communists ... openly declare that their ends can only be attained by the forcible overthrow of all existing social conditions. Let the ruling classes tremble at a Communist revolution. The proletariat have nothing to lose but their chains. They have the world to win. Working men of all countries unite!

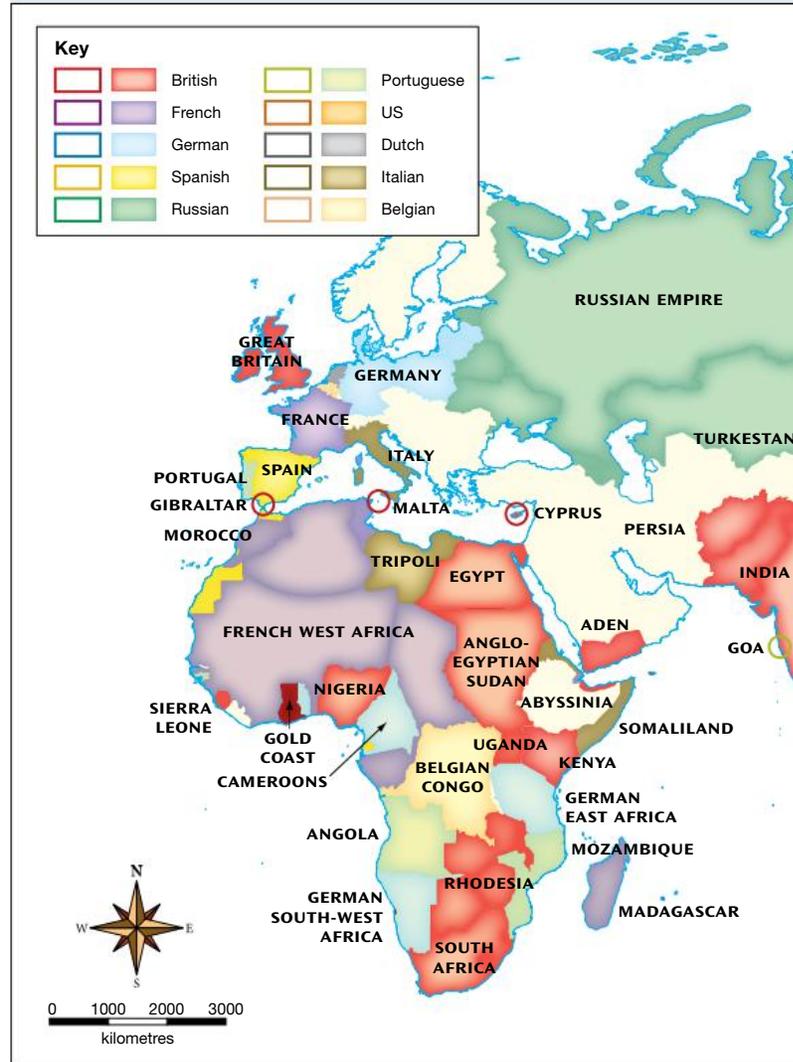
SkillBuilder discussion

Evaluating

1. Refer to **SOURCE 4**. Describe the pattern of control by European nations across Africa in 1914.
2. Mind map the impacts that this would have on Africa.
3. How have things changed? Does the same control exist today?



SOURCE 4 European Imperialism – Imperial territories in Africa, 1914.



Source: Map drawn by Spatial Vision.

13.14.2 Political ideas

In traditional European feudal society, people were split into strict social classes. At the top were the royalty and the aristocracy, who owned most of the land. Next, there was the middle class, which included tradespeople, artisans and businesspeople. At the bottom were the lower class, made up of many peasants who worked the land for the aristocracy.

As Britain industrialised, many of these peasants moved to towns and became factory workers. The higher you were in the social classes, the more power and wealth you had. During the eighteenth century, many writers and thinkers began to challenge this structure and power imbalance and suggested new ways to organise society.

Egalitarianism

Egalitarianism is the belief that everyone should be treated equally and have the same rights. Americans such as Benjamin Franklin were inspired by these European ideas and used them to create the United States Declaration of Independence in 1776 (see **SOURCE 5**), although equality wasn't given to slaves.

SOURCE 5 United States Declaration of Independence, 1776

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed ...

Egalitarianism was also important in the French Revolution. In August 1789, the National Constituent Assembly adopted the Declaration of the Rights of Man and of the Citizen (see **SOURCE 6**), which stated that all citizens should have equal rights, including the right to elect representatives. These ideas influenced reformers like Robert Owen, the Chartists, and writers like Marx and Engels.



SOURCE 6 National Constituent Assembly of France: Declaration of the Rights of Man and of the Citizen, 1789

Article I — Men are born and remain free and equal in rights. Social distinctions can be founded only on the common good.

Article II — The goal of any political association is the conservation of the natural and imprescriptible rights of man. These rights are liberty, property, safety and resistance against oppression.

Article III — The principle of any sovereignty resides essentially in the Nation. No body, no individual can exert authority which does not emanate expressly from it.

Article IV — Liberty consists of doing anything which does not harm others: thus, the exercise of the natural rights of each man has only those borders which assure other members of the society the enjoyment of these same rights. These borders can be determined only by the law.

Article V — The law has the right to forbid only actions harmful to society. Anything which is not forbidden by the law cannot be impeded, and no one can be constrained to do what it does not order.

Article VI — The law is the expression of the general will. All the citizens have the right of contributing personally or through their representatives to its formation. It must be the same for all, either that it protects, or that it punishes. All the citizens, being equal in its eyes, are equally admissible to all public dignities, places and employments, according to their capacity and without distinction other than that of their virtues and of their talents.

Feminism

During this time, it was noticed that egalitarianism often didn't include women. Women's wages were much lower than men's. Emma Paterson described them as 'disgracefully low', and many women campaigned to improve pay and conditions. Mary Wollstonecraft (1759–1797) wrote about women's inequality.

Later, Bessie Rayner Parkes (1829–1925) highlighted the unfair treatment of women and used her writing to draw attention to specific causes. She also spoke against slavery and helped gather signatures to end it. Her 'Remarks on the Education of Girls' highlighted the limited career opportunities available to women at that time.

Other political ideas are summarised in **TABLE 2**.

TABLE 2 A summary of the key political ideas at the time of the Industrial Revolution

Philosophy	Description	Key principles
Democracy	System of government where power resides with the people, exercised directly or through elected representatives	Equality, freedom, rule of law, fair elections, freedom of speech, independent judiciary, transparent government operations
Liberalism	Political and social philosophy advocating for individual rights, freedom and equality	Individual autonomy, social justice, free markets, rule of law, democratic institutions, freedom of speech, privacy rights
Conservatism	Political and social philosophy that prioritises tradition, stability and continuity	Tradition, stability, continuity, family values, cultural heritage, respect for authority, free markets, limited government intervention, individual responsibility
Anarchism	Political philosophy advocating for a society devoid of hierarchical authority and state control	Individual freedom, autonomy, voluntary cooperation, mutual aid, direct democracy, decentralised organisation
Nationalism	Doctrine developed during the French Revolution, shifting loyalty from the monarch to the nation	Sovereignty resides in the nation, conscription (<i>levée en masse</i>), national identity, resistance to foreign rule

SOURCE 7 Declaration of the French National Convention, 23 August 1793

From this moment until such time as its enemies shall have been driven from the soil of the Republic, all Frenchmen are in permanent requisition for the services of the armies. The young men shall fight; the married men shall forge arms and transport provisions; the women shall make tents and clothes and shall serve in the hospitals; the children shall turn old lint into linen; the old men shall betake themselves to the public squares in order to arouse the courage of the warriors and preach hatred of kings and the unity of the Republic.

13.14.3 Scientific ideas

In the seventeenth and eighteenth centuries, new scientific discoveries made people question the Christian religion. Some still believed the Bible's story of God creating the Earth in seven days and that all humans came from Adam and Eve. Charles Darwin's work challenged these ideas.

Did you know ?

Ada Lovelace (1815–1852) is often called the first computer programmer. She created the programme for Charles Babbage's prototype digital computer, or 'Analytical Engine' as he called it. Her programming would help the machine calculate Bernoulli numbers and although it was never actually constructed her programme remains as the first ever written for implementation on a computer.

The early programming language 'Ada' was named for her and the second Tuesday in October that recognises contributions of women to science, technology, engineering and maths — subjects you may know collectively as 'STEM' — is known as Ada Lovelace Day.

Darwinism

Charles Darwin was a **naturalist**. He sailed around the world from 1831 to 1836 and noticed differences in animals and plants. He thought that species change over time to survive better in their environments. This idea is called 'survival of the fittest'.

In 1859, Darwin published *On the Origin of Species*, detailing his theory of evolution through natural selection. He argued genetic variations in plants and animals make some more successful than others, explaining the diversity of species.

In 1871, Darwin's book *The Descent of Man* proposed that humans descended from ape-like ancestors. His theories, termed 'Darwinism', were highly controversial at the time.

SOURCE 8 Charles Darwin, *On the Origin of Species*, 1859

As many more individuals of each species are born than can possibly survive; and as, consequently, there is a frequently recurring struggle for existence, it follows that any being, if it vary however slightly in any manner profitable to itself, under the complex and sometimes varying conditions of life, will have a better chance of surviving, and thus be *naturally selected*. From the strong principle of inheritance, any selected variety will tend to propagate its new and modified form.

SkillBuilder discussion

Analysing

1. What perspective does the cartoonist have in **SOURCE 9** on Darwin's theory of evolution?
2. Depending on your response to Question 1, do you think that this would be most people's perspective?

SOURCE 9 This cartoon was published in *Punch* magazine in 1882.



Religious responses to Darwinism

Darwin's ideas about evolution contradicted what Christian churches taught about how the world and life were created. Different religious groups reacted in various ways. Conservative churches rejected Darwin's theories completely, insisting on a literal interpretation of the Bible's creation story. Liberal church leaders believed evolution was the method God used to create life, seeing no conflict between Darwin's theory and their faith. Today, most scientists accept Darwin's ideas, but evolution remains controversial. Some Christian groups still only accept the Bible's creation story.

13.14 SkillBuilder activity

COMMUNICATING AND REFLECTING

A toy company is releasing action figures of significant historical figures. Your task is to design a historical action figure for one of the following people: Adam Smith, Karl Marx, Benjamin Franklin, Charles Darwin, Ada Lovelace or Mary Wollstonecraft.

1. Action figures usually have specific clothing designed to reflect their personality. What will your historical figure be wearing? **Sketch** the product.
2. Most action figures come with an accessory or two, whether that be a weapon of some sort, or an item that is associated with that person. What two accessories will accompany your figure? Why are they important to them?
3. The packaging for your figure needs a brief outline of why they deserve to be in action figure form. You can write no more than 70 words for the packaging. How significant is your historical figure? Why do they deserve to be an action figure in the new 'historical figures' range?

13.14 Exercise

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Learning pathways

LEVEL 1

1, 3, 5

LEVEL 2

2, 6, 7, 9

LEVEL 3

4, 8, 10

REMEMBER AND UNDERSTAND

1. Adam Smith believed that society as a whole would benefit from the efforts of entrepreneurs. True or false?
2. **Identify** in what ways the beliefs of socialists were completely opposed to those of capitalists.
3. What were the key principles of egalitarianism?
 - A. All people are not created equal and should not have equal rights.
 - B. All people are not created equal and should have equal rights.
 - C. All people are created equal and should not have equal rights.
 - D. All people are created equal and should have equal rights.
4. **Describe** the experience Charles Darwin had that led him to develop his ideas about the 'survival of the fittest'.
5. Why were some church leaders able to accept Darwin's theories?
 - A. Because the government forced them to do so
 - B. Because they believed that all God's creatures were created equal
 - C. Because they interpreted evolution as the means by which God had created life on Earth
 - D. Because they believed in scientific principles

ANALYSE AND APPLY

6. **Explain** Adam Smith's concept of the 'invisible hand' as referred to in **SOURCE 2**, and give an example of how it might work.
7. What is meant by the following sentence in **SOURCE 5**: 'Governments are instituted among Men, deriving their just powers from the consent of the governed ...'.
8. Prior to 1789, the law in France consisted largely of decisions made exclusively by the King and his advisors. **Identify** how Article VI in **SOURCE 6** directly opposes this idea of royal lawmaking power.
9. **Describe** what Darwin meant by the term 'naturally selected' in **SOURCE 8**.

EVALUATE AND COMMUNICATE

10. **Evaluate** some of the possible ways in which Adam Smith's ideas might have influenced the attitudes of many factory owners in Britain during the Industrial Revolution.

Answers and sample responses for this topic are available online.

Inquiry: What was it like to grow up in an industrial town?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the variety of sources that can be used by historians to understand this period in history.

Background

You are researching the life of a 14-year-old living in one of the large industrial towns in Britain during the Industrial Revolution, so that you can provide a record for future generations to understand what life was like for working-class people at this time. You will create an annotated visual summary of your daily life to describe the living and working conditions that children experienced.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry process

Step 1 Questioning and researching

Write your **inquiry question**.

Conduct research to find appropriate images. Your visual diary should consist of a collection of relevant images that represent different aspects of life in the industrial towns of Britain at this time. Those images could be images you have created yourself or can be images gathered from online sources. Some of the images in this topic that are relevant could be used, but try to look further to gather more perspectives.

Step 2 Analysing

Construct a question around each image that will help unpack the overall question. For example, 'How does this image reveal the working conditions for 14-year-olds in industrial towns?'

Step 3 Evaluating

Each image should be accompanied by a paragraph that answers the question you have asked in your own words. It should **explain** what is happening and make the connection to the life of a 14-year old. It might be something that affects them directly, or it could be an indirect connection because it affects their family. You might like to include a subheading for each image to highlight the aspect of life you are presenting.

Remember the guiding inquiry question: 'What was it like to grow up in an industrial town?' Your images and paragraphs will provide your response to this question. You should provide an overall summary of your answer to the question in a single paragraph.

Step 4 Communicating and reflecting

Communicate your findings in the form of a booklet, a poster (A2 size), or a PowerPoint (or similar) presentation.

LESSON 13.16 Review

13.16.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

13.2 How do we know about the Industrial Revolution?

- Much of what we know about medieval Europe is from different types of evidence that provide us with information.
- Sources from medieval Europe include artwork, written sources and artefacts, monuments and buildings.

13.3 How did the Industrial Revolution begin and develop?

- Technological advances and easy access to raw materials helped Britain grow industries in the eighteenth and nineteenth centuries.
- Changes in farming and a wealthy middle class investing in new production methods were key causes of the Industrial Revolution.
- Better transport systems and the growth of the empire provided the means to move raw materials and sell finished products from British factories.

13.4 How did changes in agriculture result in changes in society?

- Enclosure combined small farms into larger ones, changing farming methods.
- New planting and ploughing techniques increased crop production.
- Better breeding improved farm animals, and farmers could sell extra produce for profit.
- Farm workers suffered from changes such as enclosure, leading to food riots and unrest.

13.5 Key developments and technology

- The introduction of new machines changed production processes and greatly increased output.
- Improvements in textiles, iron-working and machinery transformed traditional manufacturing and led to the growth of factories.
- Economic changes, including the rise of capitalism and the development of banks, provided the financial support needed for industrial growth.
- Cultural shifts, such as the focus on progress and the value placed on new ideas, created an environment where innovations could thrive.

13.6 Why coal and iron were so vital

- Steam pumps allowed deeper coalmines by removing extra water.
- Coke in blast furnaces improved iron quality.
- Puddling technique made stronger, flexible iron for more uses.

13.7 The importance of investment

- In the seventeenth century, a powerful middle class emerged in Britain, focusing on business and trade.
- Banks gave money to merchants and factory owners to help them invest in new industrial methods.
- The British government supported this growing business class by making laws that helped trade and business.

13.8 The impact of new transport

- Large factories needed good transport to bring materials and send out products.
- Canals and improved roads helped move goods quickly and efficiently.
- Steam locomotives changed transport in Britain after 1830.

13.9 Working conditions in mines and factories

- Working conditions in textile factories were very unpleasant and often dangerous.
- Factory workers, including women and children, were forced to work long hours.
- Men, women and children all worked in coalmines, in dangerous and unhealthy conditions.
- The Mines Act of 1842 placed restrictions on the employment of women and children in coalmines.

13.10 Treatment of the poor and unemployed

- The New Poor Law required poor people to live in workhouses, which were designed to be as unpleasant as possible.
- Families in the workhouses were split up, given very basic food, and had to do hard work. Children received little education and were often sent to work at a young age.
- A scandal in 1845 revealed terrible conditions in the Andover workhouse, where the Master mistreated everyone, leading to national outrage.

13.11 Working conditions for children

- Young children worked in textile factories doing dangerous jobs like piecing and scavenging.
- Girls pulled carts of coal in mines, while boys climbed chimneys to clean them.
- Children as young as four opened and closed ventilation doors in mines.

13.12 Social unrest, protests and riots

- Rapid changes during the Industrial Revolution led to protests and riots, such as those led by the Luddites who were against new machinery.
- Trade unions, which were groups formed to protect workers' rights, were banned initially but became legal in 1824 to help improve working conditions.
- The Chartist movement in the 1830s fought for fairer elections and more democratic rights, influencing future reforms.

13.13 The Industrial Revolution and the slave trade

- The slave trade involved shipping slaves across the Atlantic Ocean, known as the 'Triangular trade'.
- Slavery was crucial for the economic success of the Americas.
- The cotton industry in the Americas heavily relied on slave labour during the nineteenth century.

13.14 New ideas for society

- New ideas like capitalism and socialism proposed different ideas about how businesses and the economy should work.
- European countries expanded their empires into Asia and Africa, spreading imperialism.
- Charles Darwin introduced the theory of evolution, known as 'Darwinism'.

13.15 Inquiry: What was it like to grow up in an industrial town?

- To gain an understanding of life in another time, it's important to consult a variety of sources.

13.16.2 Key terms

abolition the end of legal acceptance of slavery

baleen a keratin substance in the mouth of the baleen whale to filter sea water and collect plankton and small fish to feed. When dried it is flexible but strong, used in clothing and other products.

bell pit a traditional form of coalmining in which a shaft is dug down to a seam of coal and then excavated outwards, with the coal raised to the surface using a winch and buckets

blast furnace a type of furnace into which air is forced to raise the temperature sufficiently to carry out the smelting of iron ore

coke a type of fuel produced by using heat to remove impurities such as coal gas and tar from coal

colony an area of land settled by people from another country. This can involve military conquest if the original inhabitants resist that settlement.

cottage industry small-scale manufacturing in which raw materials are processed in workers' homes

depose remove from power

empire a number of different countries or colonies controlled by the government of one country

enclosure consolidation of open fields and common land into single farms owned by one farmer, and fenced off from neighbouring farms

entrepreneurship the act of being an entrepreneur

goldsmith a craftsman who works with gold and other precious metals

indoor relief the provision of assistance to the inmates of a workhouse

industrialisation the process by which a country transforms itself from mainly agricultural production to the manufacturing of goods in factories and similar premises

intercontinental involving or occurring between two or more continents

middle class the social group between the wealthy upper class and the working class. During the Industrial Revolution, this included merchants, shopkeepers, doctors, lawyers, and other professionals

Napoleonic Wars a series of wars between the French Empire, led by Napoleon Bonaparte, and a number of other European nations between 1803 and 1815

naturalist a term once used to describe a scientist who studies plants and animals. Today such a person would be called a biologist.

outdoor relief the provision of assistance to the poor while allowing them to remain in their own homes

patent a legally enforceable right to make or sell an invention, usually granted by government, to protect an inventor's idea from being copied

pauper a very poor person

picking oakum unpicking short lengths of rope coated in tar. Oakum would be rammed between the planks on wooden ships to make them watertight.

pig iron the initial product resulting from the smelting of iron ore in a blast furnace

repeal withdrawal of a law or set of laws by Parliament

royal commission a special public inquiry set up by government to investigate a particular issue and to make recommendations for changes in the law

rural population people living in the countryside, rather than in towns or cities

strike attempt by employees to put pressure on their employer by refusing to work

subsistence farming farming that provides only enough to satisfy the basic needs of the farmer or community

suffrage the right to vote

threshing machine a mechanical device invented in the late 1700s that separated grain from wheat stalks much faster than doing it by hand. The threshing machine could do the work of several people in a fraction of the time.

treadwheel a punishment device, also called the 'everlasting staircase', comprising a large, iron-framed, hollow cylinder with wooden steps. As the device rotated slaves were forced to keep stepping forward.

urban population people living in cities or large towns

workhouse an institution built to house the poor

13.16.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry questions posed in the Overview:

What were the significant social, economic, environmental and technological causes of the Industrial Revolution?

1. Now that you have completed this topic, what is your view on the questions? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry questions, outlining your views.

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-  **Post-test** Online post-test
-  **eWorkbook** Customisable worksheets for this topic
Reflection
-  **Digital document** Key terms glossary

13.16 Review exercise

Learning pathways

LEVEL 1

4, 6, 8, 10, 12, 14

LEVEL 2

3, 7, 9, 11, 13

LEVEL 3

1, 2, 5, 15, 16

REMEMBER AND UNDERSTAND

- What were the two key technological advances that led to industrialisation in Britain in the latter part of the eighteenth century?
 - Spinning jenny and power loom
 - Steel ploughs and sheep breeding
 - Textile machines and steam power
 - Railways and clipper ships
- How did an expanding empire contribute to the Industrial Revolution in Britain?
 - It allowed the British navy to become more powerful.
 - It provided a source of raw materials.
 - It allowed the introduction of new technology.
 - It made the British Empire the most powerful in the world.
- What were the major disadvantages of the traditional three-field rotation system?
 - It left peasant farmers poorer than they had been before.
 - It allowed the cattle to get in and eat the turnips.
 - It was very time consuming to harvest crops from the fallow field.
 - Weeds and animal diseases could spread easily.
- Joseph Foljambe was famous for developing what?
 - The Rotherham plough
 - Changes to crop rotation methods
 - Improved stock breeding methods
 - A more businesslike approach to farming
- Which of the following was not a major factor in child labour reforms during the Industrial Revolution?
 - The passing of Factory Acts to limit working hours
 - The abolition of slavery in the British Empire
 - The efforts of trade unions and labor strikes
 - Reports exposing poor working conditions in factories and mines
- How were agricultural workers disadvantaged by enclosure?
 - They had to work for wealthy farmers rather than wealthy landlords.
 - They no longer had access to common land.
 - They were subject to many more diseases.
 - Their family members had all moved to the towns to work in factories.
- Who was responsible for looking after the poor in pre-industrial England?
 - The village or parish
 - The village minister
 - The village doctor
 - The local manor lord

8. Why was there a deliberate policy to make the workhouse an unpleasant place to live?
 - A. To make them cheaper to run
 - B. To punish poor people
 - C. To make the workhouse a reasonable option
 - D. To make work seem a better option
9. What was the purpose of the Combination Acts?
 - A. To allow the combination of worker and employer unions
 - B. To prevent workers from using combine harvesters
 - C. To prevent workers from combining to form unions
 - D. To allow for workhouses to be combined with factories
10. How many hours a day did the Factory Act of 1819 limit children to working?
 - A. 4
 - B. 8
 - C. 10
 - D. 12
11. Which of the following was not an aim of the Chartists?
 - A. A secret ballot at elections
 - B. Annual election for parliament
 - C. The vote for all men and women over the age of 21
 - D. No property qualifications for members of parliament

ANALYSE AND APPLY

12. **Explain** why the Industrial Revolution could be described as the most important period of change in modern history.
13. **Describe** why a change in agricultural methods supported the growth of an urban workforce.
14. It is often said that 'necessity is the mother of invention'. **Outline** the way in which one example of a new invention in the eighteenth century was a response to necessity.

EVALUATE AND COMMUNICATE

15. Support for the Tolpuddle Martyrs and the People's Charter demonstrates that many people were becoming more politically active. **Explain** underlying or long-term causes of this increased activism.
16. **Determine** how we can tell that the British Parliament was more strongly influenced by the interests of factory owners than by those of ordinary workers. Why might this have been the case?

Answer and samples responses for this topic are available online.

GLOSSARY

abolition the end of legal acceptance of slavery

accurate correct and factual

accused the party in a criminal trial against whom an action has been brought

Act a law passed by parliament

allocate assign resources to different uses within the economy

ancient history the period from the beginning of civilisation to the fall of the Roman Empire

aquifer a body of permeable rock below the Earth's surface that contains water, known as groundwater

archbishop head bishop

artillery large mounted firearms such as the cannon

Australian Constitution the foundational legal document that establishes the framework for the governing of Australia

backwash the movement of water from a broken wave as it runs down a beach, returning to the ocean

balance of power the distribution of authority and responsibilities among the three branches of government

balance of probabilities requires reasonable satisfaction that the facts as presented are probably correct and occurred as stated

baleen a keratin substance in the mouth of the baleen whale to filter sea water and collect plankton and small fish to feed. When dried it is flexible but strong, used in clothing and other products.

bell pit a traditional form of coalmining in which a shaft is dug down to a seam of coal and then excavated outwards, with the coal raised to the surface using a winch and buckets

beyond reasonable doubt based on evidence, there is no other logical conclusion that can be made other than that the accused is guilty

biased one-sided or prejudiced; seeing something from just one point of view

Bill a proposed law that has not yet been agreed to by parliament or received royal assent

billabong a U-shaped body of water created when a wide meander is cut off from the main channel of a river after it changes its course. Also known as an oxbow lake.

binding precedent a decision made in a higher court in the same court hierarchy that must be followed by a lower court where the facts of the cases are similar

bishop clergyman who governs a diocese, a large church district

blasphemy any words or actions that were considered disrespectful or insulting towards God or religion. This included things like cursing, speaking rudely about religious figures or religion, or denying the existence of God. It was considered a serious crime and was punished by fines, imprisonment, or even death.

blast furnace a type of furnace into which air is forced to raise the temperature sufficiently to carry out the smelting of iron ore

bloodletting medieval medical practice where blood was deliberately removed using cuts or leeches; commonly used during plagues though it was often harmful

breach of contract a situation where a legally binding agreement is not honoured by one or more of the parties to the contract

bubonic plague the commonest form of plague in humans, characterised by fever, delirium, and the formation of buboes

budget an itemised estimate of income and expenses for a given period

budget estimates of all government income to be raised by taxes and other charges, and the planned spending of that income, within any given year

burden of proof the legal principle describing who has to prove a case in court. In a criminal trial, this burden is on the prosecution.

business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit

capitalism economic system in which the means of production, distribution and exchange are privately owned

capitalist spirit the attitude of working hard, taking risks, and investing to make a profit in a free-market economy

cardinal leading clergyman who is a member of the Pope's Council, or Sacred College, and who has the power to elect the Pope from among his own group

casual an employee who works only when needed

cathedral main church of a diocese; contains the bishop's throne

cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences

change the process by which places, environments or spatial patterns alter over time. In Geography, change can be natural (like erosion or climate change) or human-made (like urban development or deforestation).

chronicle a record of events as they happened, usually written by a person who was present at the time

chronology a record of past events in order of time, from ancient Greek *chronos* (time) and *logos* (word)

cite give the details of

city-state a city that with its surrounding territory forms an independent state

civilisations societies that have towns and features such as complex forms of government and religion

clergy officials of the Church

codified refers to laws that have been collected and organised, usually in written form

coke a type of fuel produced by using heat to remove impurities such as coal gas and tar from coal

colony an area of land settled by people from another country. This can involve military conquest if the original inhabitants resist that settlement.

Commercial Revolution a time in history when trade and business grew quickly across Europe, leading to new ways of buying, selling and making money that helped shape the modern economy

common law law developed by judges through the decisions of courts

concentric having a common centre

confidence the level of support that the government has from the parliament, which is necessary for the government to remain in power

constructive waves waves that deposit sand on the beach

contestability when particular interpretations of the past are open to debate

continuity and change the concept that while many changes occur over time, some things remain constant

convection currents currents created when a fluid is heated, making it less dense and causing it to rise through surrounding fluid and sink if it is cooled; a steady source of heat can start a continuous current flow

converging plate a tectonic boundary where two plates are moving towards each other

cottage industry small-scale manufacturing in which raw materials are processed in workers' homes

craftsmen skilled workers who make things by hand, often using traditional methods

credit rating evaluates how likely a person or entity is to repay borrowed money based on their past borrowing and repayment history. Lower ratings mean higher risks and can result in higher interest rates or difficulty getting loans.

Crown the King's authority in the Australian parliament, represented by the governor-general at the federal level and a governor at the state level

current financial position calculation of what income someone has (money coming in) minus any regular expenses (money out)

curtain wall outer wall surrounding an inner wall in a castle

cusate spit a pointed landform made of sand or gravel that forms where waves hit the shore from two directions

customary law rules for behaviour developed by and for Aboriginal and Torres Strait Islander Peoples

day labourer a person who worked for daily wages, often doing hard physical jobs like farming or construction, without long-term employment or job security

defamation unlawful damage to a person's good reputation through written or verbal statements

defendant the party in a civil trial against whom an action has been brought

demand a need or want of consumers expressed by the spending of income

democracy a form of government in which the people determine how they will be governed

democratic supporting democracy, or the system of government where supreme power is vested in the people and exercised directly by them or by their elected representatives under a free electoral system

depose remove from power

deposition the laying down of material carried by rivers, wind, ice and ocean currents

describe to give details about features and characteristics of a person, place, thing or idea

destructive wave a large powerful storm wave that has a strong backwash

direct action showing your disapproval or disagreement with the government and their policies by directly trying to influence their decisions and the views of the public, for example through protesting

direct taxation a type of tax that is paid straight to the government by individuals or businesses on their income or profits. For example, income tax is a direct tax because it is taken directly from a person's earnings.

discussions responses to a topic or question that present arguments for and against an idea, supported with evidence and examples

disposable income the amount of money a person has left to spend or save after paying taxes and essential expenses

dispute an argument

dissent disagreeing with a decision, opinion or set of beliefs, and expressing this disagreement

divergent plate a tectonic boundary where two plates are moving away from each other and new continental crust is forming from magma that rises to the Earth's surface between the two

dormant inactive or sleeping, with the potential to become active at any time

downstream nearer the mouth of a river, or going in the same direction as the current

drainage basin an area of land that feeds a river with water, or the whole area of land that is drained by a river and its tributaries

duke in England, a lord whose status placed him just below that of a prince; elsewhere in Europe, a ruler of a small state called a duchy or dukedom

economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants

economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives

economic scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them

economic system a way of organising the production and distribution of the nation's goods, services and incomes

economy a system established to determine what to produce, how to produce and to whom production will be distributed

ecosystems interconnected community of plants, animals and other organisms that depend on each other and on the non-living things in their environment

electoral roll an official list of people who are registered and eligible to vote in elections

electorate an area of Australia that elects one member to parliament

emigrants people exiting a country of origin

empathy understanding how someone else might feel or think, especially when learning about people's experiences in the past

empire a number of different countries or colonies controlled by the government of one country

enclosure consolidation of open fields and common land into single farms owned by one farmer, and fenced off from neighbouring farms

endemic normally and regularly found in a particular location or environment

entrepreneur a person who sets up a business or businesses, taking on financial risks in the hope of profit

entrepreneurship the act of being an entrepreneur

environment the natural and human surroundings in which people, plants and animals live, including ecosystems, landscapes, and built environments.

epicentre the point on the Earth's surface directly above the focus of an earthquake

equilibrium a resting point in a market where the forces of supply and demand are equally matched, and where the market is 'cleared'

erosion the wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity

estuary the wide part of a river at the place where it joins the sea

evaluative based on assessing value

evidence information that is used to show why a hypothesis, opinion or explanation is correct

expenses the regular outgoings of money (money out) that a person may have. This might include rent or a mortgage, grocery bills, energy bills, a loan repayment for a car, and medical bills.

explanation a response to a topic or question that outlines how and why something happens, and the relationships involved, and provides supporting evidence and examples

facts information that is objectively true (not influenced by opinion or feelings)

fallow when a field was left for a period without being sown in order to restore its fertility through the nutrients in the soil

fault an area on the Earth's surface that has a fracture; a fault lies at the major boundaries between Earth's tectonic plates

fault plain a surface along which the Earth's crust has broken and moved during an earthquake

fetch the distance over which the wind blows across the surface of water. A long fetch results in larger, more powerful waves, whereas a short fetch results in smaller waves.

feudalism social order in medieval Europe

fief a gift, usually land, given by a lord to a vassal (or tenant) in exchange for loyalty and service

floodplain an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding

fly-in fly-out (FIFO) a system in which workers fly to work, in places such as remote mines, and after a week or more fly back to their home elsewhere

focus the point where the sudden movement of an earthquake begins

Franks people of a group of a Germanic nation who ruled in western Europe from the sixth century CE

freedom of assembly the right to gather peacefully in public for meetings, protests, or events

freedom of association the right to join or form groups, clubs, or organisations voluntarily

freedom of conscience the right to think and believe freely, including moral and ethical beliefs

freedom of religion the right to practise any religion or none, without interference from the government

freedom of speech the right to express opinions publicly without government censorship, within legal limits

full-time an employee who works 35 hours or more per week, or who works the minimum number of hours stipulated by the industrial award for that occupation or industry

geld a form of land tax

geothermal energy energy derived from the heat in the Earth's interior

geyser a hot spring that intermittently erupts, sending water and steam into the air due to underground heat and pressure

glaciers large, slow-moving rivers of ice formed by the accumulation and compression of snow. They are found in mountain and polar regions.

goldsmith a craftsman who works with gold and other precious metals

groundwater water stored underground in spaces between rocks and soil

guild an association of people engaged in a particular trade or craft for the mutual benefit of its members

heresy opinion that challenged or differed from that of the Roman Catholic Church or the less tolerant Protestant churches

heretic one who rejects the teachings of the Church

homicide the killing of one person by another person

hotspot an area on the Earth's surface where the crust is quite thin and volcanic activity can sometimes occur, even though it is not at a plate margin

hypothesis an idea or explanation that is used as a starting point for deeper investigation or research

identify to recognise and name

illumination hand-painted illustration in a medieval book

immigrants people moving into their destination country

income the money that a person receives. This can consist of money earned from employment such as a wage, but it also includes income from other sources.

indictable offence a serious criminal offence such as murder or armed robbery

indirect taxation a type of tax that is added to the price of goods and services and paid to the government by the seller. Consumers pay this tax when they buy things. For example, the Goods and Services Tax (GST) is an indirect tax included in the price of most items.

indoor relief the provision of assistance to the inmates of a workhouse

industrialisation the process by which a country transforms itself from mainly agricultural production to the manufacturing of goods in factories and similar premises

inferential coming to a reasonable conclusion after piecing together evidence

infographic a visual way of presenting data and information with images and very little text

infrastructure the facilities, services and installations needed for a society to function, such as transportation and communications systems, water and power lines

inputs those things that contribute to the production process

inselberg an isolated hill, knob, ridge, outcrop or small mountain that rises sharply from the surrounding landscape

interconnection the way people, places and environments are linked to each other through natural processes, trade, migration, culture and technology.

intercontinental involving or occurring between two or more continents

interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other

interest group an organisation that seeks to influence government policy on specific issues

interest rate the cost of borrowing money — the percentage of the loan you have to pay back on top of what you borrowed

intergenerational trauma trauma that has lasting effects carried on from those who directly experienced it to their children and grandchildren

intermittent describes a stream that does not always flow

internal migration migration within a country

jury in a criminal trial, a randomly selected group of people who decide the guilt or innocence of an accused person

juvenile a young person aged between 10 and 17 who will be dealt with through the youth justice system. Once a person turns 18, they are considered an adult and will be dealt with under the adult justice system.

keep innermost tower of a castle

knight a warrior from the Middle Ages who wore armor, rode a horse, and promised to protect others and follow a code of honour called chivalry

labour the human skills and effort required to produce goods and services

lance a long wooden shaft with a steel point used as a weapon by mounted knights

landslide a rapid movement of rocks, soil and vegetation down a slope, sometimes caused by an earthquake or by excessive rain

Latin the language of ancient Rome and its empire

laws the system of rules that Australia recognises as regulating the actions of its citizens, which it may enforce by the imposition of penalties and sanctions

legislation a law made by parliament

liable legally responsible for a civil wrong

liquefaction transformation of soil into a fluid, which occurs when vibrations created by an earthquake, or water pressure in a soil mass, cause the soil particles to lose contact with one another and become unstable; for this to happen, the spaces between soil particles must be saturated or near-saturated

literal to be exact, without exaggerating or misleading

lithosphere the crust and upper mantle of the Earth

Little Ice Age when the weather in Europe and other parts of the world became much colder than usual, causing problems like poor harvests, food shortages, and harsher living conditions.

lobby group a group that actively tries to persuade politicians to support their cause or policy

long-term goals personal financial goals that you will want to accomplish in the future — e.g. to buy a house

longshore drift a process by which material is moved along a beach in the same direction as the prevailing wind

lords feudal term for aristocracy of big landowners

lymph node lump of tissue that helps the body fight infection; part of the immune system

mace iron-headed club

magistrate a court official who hears cases in the lowest court in the legal system

manslaughter the accidental or unintentional killing of one person by another person

mantle the layer of the Earth between the crust and the core

market the place where goods, services or resources are exchanged between buyers and sellers

market capitalist economy an economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses

martyr someone who dies for their faith or is recognised by their religion in death

Mass Roman Catholic Church service

material living standards access to physical goods and services

meanders a winding curve or bend in a river

miasma unpleasant smells or fumes thought to be the cause of disease in medieval times

microclimate specific atmospheric conditions within a small area

middle class the social group between the wealthy upper class and the working class (or the privileged nobility and peasants). During the Industrial Revolution, this included merchants, shopkeepers, doctors, lawyers, and other professionals.

migrant a person who leaves their own country to go and live in another

migration moving from one country to live in another

moat water-filled defensive ditch surrounding a castle

motte a mound upon which a castle was built

Napoleonic Wars a series of wars between the French Empire, led by Napoleon Bonaparte, and a number of other European nations between 1803 and 1815

naturalist a term once used to describe a scientist who studies plants and animals. Today such a person would be called a biologist.

needs goods or services that consumers consider necessary to maintain their standard of living

negligence a situation where a person breaches a duty to exercise reasonable care to avoid a foreseeable risk, resulting in another person being injured or suffering a risk of injury

New World a term for the Americas during Early Modern Times

nobles the aristocracy; hereditary privileged class

non-material living standards factors that affect a person's quality of life regardless of income

Normandy now a French province, in the Middle Ages it was a dukedom in northern France

nuisance interference with someone's enjoyment of public or private property

nun member of a closed community of women living under religious vows and rules

opinion a point of view that may be subjective (based on personal feelings rather than fact) or objective

opportunity cost the next best alternative given up whenever a choice is made

opposition the main political party in the lower house of parliament that's not in power

outdoor relief the provision of assistance to the poor while allowing them to remain in their own homes

oxbow lake a U-shaped body of water created when a wide meander is cut off from the main channel of a river after it changes its course. In Australia it is referred to as a billabong.

palisade tall fence made of pointed timber stakes driven into the ground

pandemic widespread across a large region

Pangaea the name given to all the landmass of the Earth before it split into Laurasia and Gondwana, which over time became the continents we know today

part-time an employee who works fewer than 35 hours per week

patent a legally enforceable right to make or sell an invention, usually granted by government, to protect an inventor's idea from being copied

patrician a wealthy and powerful person in ancient Rome who belonged to the highest social class and often helped make important decisions in government

pauper a very poor person

peasant a poor farmer who lived in the countryside and worked the land, often for a lord, with little money or power and few rights

peninsula land jutting out into the sea

percolate filter through porous material such as soil

perennial describes a stream that flows all year

permafrost a layer beneath the surface of the soil where the ground is permanently frozen

persecution oppression or punishment of a person or group of people, usually because of their religion

perspective a point of view, way of thinking, opinion or belief about an issue, event or thing

persuasive precedent a decision made in a lower court or a court in a different hierarchy that does not have to be followed but may be used as a guide

petition a formal request for change signed by many people

phalanx body of foot soldiers in close battle order

physical processes continuing and naturally occurring actions such as wind and rain

picking oakum unpicking short lengths of rope coated in tar. Oakum would be rammed between the planks on wooden ships to make them watertight.

pictograph a graph that uses pictures to represent data

pig iron the initial product resulting from the smelting of iron ore in a blast furnace

pike long spear-like weapon carried by foot soldiers

place a specific location on Earth that has unique physical and human characteristics, making it meaningful to people.

plagiarise to copy other people's work and present it as one's own

plaintiff the person who commences a legal action in civil law

plateau an extensive area of flat land that is higher than the land around it. Plateaus are sometimes referred to as tablelands.

pneumonic plague a severe lung infection caused by the bacterium *Yersinia pestis*

population density the number of people living within one square kilometre of land; it identifies the intensity of land use or how crowded a place is

population distribution the pattern of where people live; population distribution is not even — cities that have high population densities and remote places such as deserts usually have low population densities

precedent a legal principle developed by a court in the process of resolving a dispute

preferential voting a voting system where voters rank candidates in order of preference, used in Australian federal elections

presumption of innocence a person charged with a criminal offence should be treated as innocent, until evidence presented in court proves they are guilty

prevailing wind the main direction from which the wind blows

primary sources objects and documents that were created or written in the period of time that the historian is investigating

primary wave also known as a P-wave; the first waves to hit an area during an earthquake, which cause a sudden jolt

privatise to sell a government-owned provider of goods or services to private investors

progressive tax system in theory, people who earn more money pay more income tax

proportional representation a voting system where seats in parliament are allocated based on the proportion of votes each party receives

prosecute to take legal action against another person for a criminal offence

prosecution legal action is initiated by the state. A prosecutor will present evidence to the court to establish guilt.

pull factor favourable quality or attribute that attracts people to a particular location

push factor unfavourable quality or attribute of a person's current location that drives them to move elsewhere

qualitative information that provides characteristics and description

quantitative information that provides measurable figures

questions issues or problems that are raised but not answered

reeve a magistrate administering law in a village

regurgitate to vomit, or bring up the contents of the stomach or throat

relationships connections between events

reliable the information in the source is more accurate than other sources (you can rely on it more to be correct)

repeal withdrawal of a law or set of laws by Parliament

resource allocation relates to decisions about how scarce resources are distributed among producers, and which types of goods and services will be produced to satisfy wants and needs

resources items of value that we use to produce goods and services to satisfy needs and wants, which include land, labour, capital and enterprise

responsible adult a parent, guardian or youth worker

rift zone a large area of the Earth in which plates of the Earth's crust are moving away from each other, forming an extensive system of fractures and faults

right an entitlement to be treated in a particular way. A legal right is a right that can be enforced by law.

river delta a landform created by deposition of sediment that is carried by a river as the flow leaves its mouth and enters slower-moving or stagnant water. It can take three main shapes: fan shaped, arrow shaped and bird-foot shaped.

robber baron a powerful and wealthy businessperson in the past who made a lot of money, often unfairly, by taking advantage of workers, customers or laws to grow their companies

royal commission a special public inquiry set up by government to investigate a particular issue and to make recommendations for changes in the law

rule of law a legal principal that all citizens are subject to the law and equal before the law. The law applies equally to all citizens regardless of status or wealth

rural population people living in the countryside, rather than in towns or cities

sacrament a sacred Christian ceremony, for example, baptism or marriage

salary fixed or regular payment for work completed or services performed

sanctuary protection offered to individuals who were seeking refuge from persecution or punishment. The right of sanctuary was based on the idea that churches and other religious institutions were sacred and provided a safe place for those in need of protection. They were granted temporary protection from arrest, allowing them time to negotiate a settlement for their crime, or seek a pardon.

sanitation facilities provided to remove waste such as sewage and household or business rubbish

scale the ratio that shows how much smaller a map is compared to the real world, e.g. one centimetre on a map equals one kilometre in real life

sea change movement of people from major cities to live near the coast to achieve a change of lifestyle

seasonal an employee who usually works during a season, such as winter or the fruit-picking season

secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying

secondary wave a type of seismic wave that moves through the Earth by shaking the ground side to side or up and down, and travels slower than primary waves

sediment material carried by water

seismic waves a wave of energy that travels through the Earth as a result of an earthquake, explosion or volcanic eruption

separation of powers the dividing of responsibilities and powers of government

septicaemic plague a plague wherein bacteria multiply in the blood

sermon moral or religious lecture delivered by a priest

shell middens Australian archaeological sites where the debris associated with eating shellfish and similar foods has accumulated over time

short-term goals goals that we want to achieve within the next couple of months or even within the year; this might include a plan to buy something

significance the importance assigned to particular aspects of the past; for example, events, developments, movements and historical sites

soluble able to be dissolved in water

space how features and places are arranged on Earth's surface; where things are located, how they are distributed, and the patterns they form

spatial distribution the way things (e.g. population or land use) are spread across places

specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources

speculator a person who invests in stocks, property or other ventures in the hope of achieving a profit and a source of income

stalactites icicle-shaped formations that hang from the roof of caves, made from minerals left by dripping water

stalagmites cone-shaped formations that grow from the cave floor, formed by minerals from dripping water

standard of living quality of life as measured by the amount of money made by an individual or household (using income per capita or income per household)

standard of proof the level of proof required to establish a case. In criminal law, the prosecution must prove that the accused is guilty beyond reasonable doubt.

statute law law made by parliament

stirrup foot supports suspended from a saddle by straps

strike attempt by employees to put pressure on their employer by refusing to work

subduction when two tectonic plates converge, one will be forced under the other and into the mantle. The other plate will be pushed up, forming mountains.

subsistence farming farming that provides only enough to satisfy the basic needs of the farmer or community

suffrage the right to vote

summary offence a minor criminal offence such as a road traffic offence and minor assault

supply a market force that relates to the quantity of a particular good or service that producers are willing to sell at a given price over a period of time

surface wave a seismic wave that travels along the Earth's surface, causing the most ground movement and damage during an earthquake

sustainability the responsible use and management of resources to meet current needs while ensuring future generations can also meet theirs.

swash the movement of water in a wave as it breaks onto a beach

tectonic plate one of the slow-moving plates that make up the Earth's crust. Volcanoes and earthquakes often occur at the edges of plates.

thatch straw used for making roofs

theologian a person who is considered to be an expert in religious matters

threshing machine a mechanical device invented in the late 1700s that separated grain from wheat stalks much faster than doing it by hand. The threshing machine could do the work of several people in a fraction of the time.

timeline a diagrammatic tool representing a period of time, on which events are placed in chronological order

tombolo landform created when a sand spit joins one island to another or the mainland

townspeople people who lived and worked in a town, often involved in trades, crafts or business, and played an important role in the town's economy and daily life

transport the movement of eroded materials to a new location by elements such as wind and water

treadwheel a punishment device, also called the 'everlasting staircase', comprising a large, iron-framed, hollow cylinder with wooden steps. As the device rotated slaves were forced to keep stepping forward.

tree change movement of people from major cities to live near the forest to achieve a change of lifestyle

trend a pattern of change over time

trend line the direction in which something is developing, moving or changing

trespass a tort (civil wrong) involving direct and intentional interference with a person, or a person's land or goods

unemployment benefit a welfare payment by government to people who are unemployed and looking for work. Such payments in Australia are generally known as the JobSeeker Payment.

urban relating to a city or town; the definition of an urban area varies from one country to another depending on population size and density

urban population people living in cities or large towns

urban sprawl when cities expand, the urban landscape invades the surrounding land, changing or removing natural ecosystems and swallowing up farmland. This expansion is known as urban sprawl.

urbanisation the growth and expansion of urban areas and the increasing proportion of people living in urban areas as compared to rural areas

useful related to your research

values individual beliefs that help to guide our actions

vassal a person who holds land for a lord, and in return pledges loyalty and service to him

volcanic loam volcanic soil composed mostly of basalt, which has developed a crumbly mixture

wage payment for work completed or services performed, usually dependent on hours worked per week or month

wants goods or services that are desired in order to provide satisfaction to the user, but which are not necessary for survival or to meet the basic standard of living in a community

watershed an area or ridge of land that separates waters flowing to different rivers

weathering the breaking down of bare rock (mainly by water freezing and cooling as a result of temperature change) and the effects of climate

workhouse an institution built to house the poor

work—life balance the division of one's time and focus between working and family or leisure activities

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