

Mathematics Level 7

Chapter 1 — Managing places: people, change, sustainability and hazards

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What people do to places and environments: build, protect, manage

For the teacher

Owns: VC2HG6K01 (Geographical Knowledge and Understanding, Management of places). **Draws on:** .E01, .E02. **Achievement standard:** owned jointly with 1C and 1D; 1A builds the change-and-management core with Victorian and national evidence.

Teaching sequence: 1. Revisit *place* (assumed from VC2HG4K02 local-place work) and define *environment* and *change* (Figure 1A.1). 2. Frame the section with build / protect / manage (Figure 1A.2). 3. Teach zoning with real Victorian zone names and the planning permit (Figure 1A.3), then the scales of decision-makers (Figure 1A.4). 4. Model Melbourne's urban growth boundary (Figure 1A.5) and work Example 1 on the Fishermans Bend decision (Figure 1A.6). 5. Teach urbanisation with the ABS capital-city figures (Figures 1A.7–1A.8) and work Example 2, pairing urbanisation with land protection (Figures 1A.9–1A.10). 6. Students attempt the “Practice with help” then “Practice on your own” tasks. 7. Close with the evidence-based writing task (first evidence draft for the 1C local study).

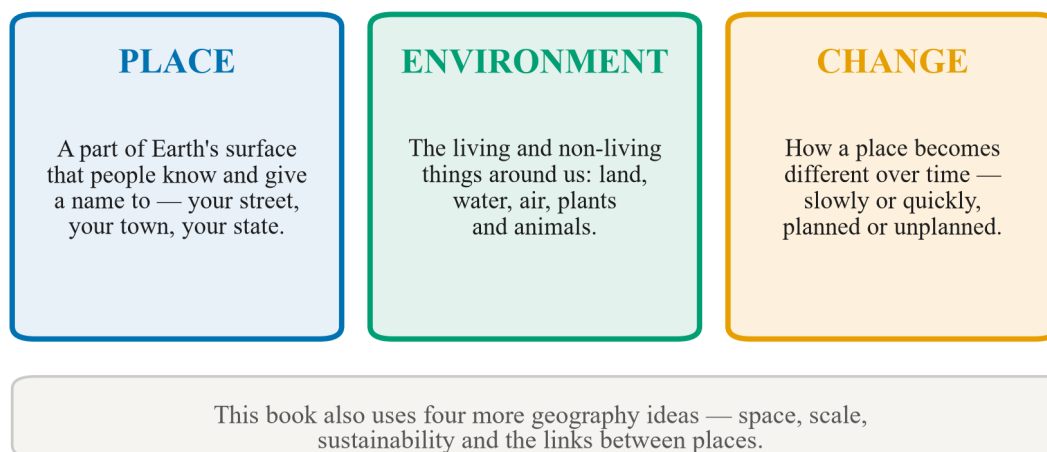
Vocabulary notes: the terms *place*, *environment*, *change*, *scale*, *zoning*, *urban sprawl*, *urbanisation* and *sustainability* are defined at first use in the student text. *Urbanisation* (the curriculum's own word in .E02) is the only above-Year-5 term retained; all other student-facing vocabulary is at or below Year 5. No First Nations content is required or used in this section (see the series front matter).

Theory

The big ideas: place, environment, change

A *place* is a part of Earth's surface that people know and give a name to — your street, your town, your state. The *environment* is the living and non-living things around us: land, water, air, plants and animals. And *change* is how a place becomes different over time — slowly or quickly, planned or unplanned. Figure 1A.1 shows the three ideas.

The three big ideas in this section



Three cards naming the big ideas of the section: place (a named part of Earth's surface), environment (the living and non-living things around us), and change (how a place becomes different over time).

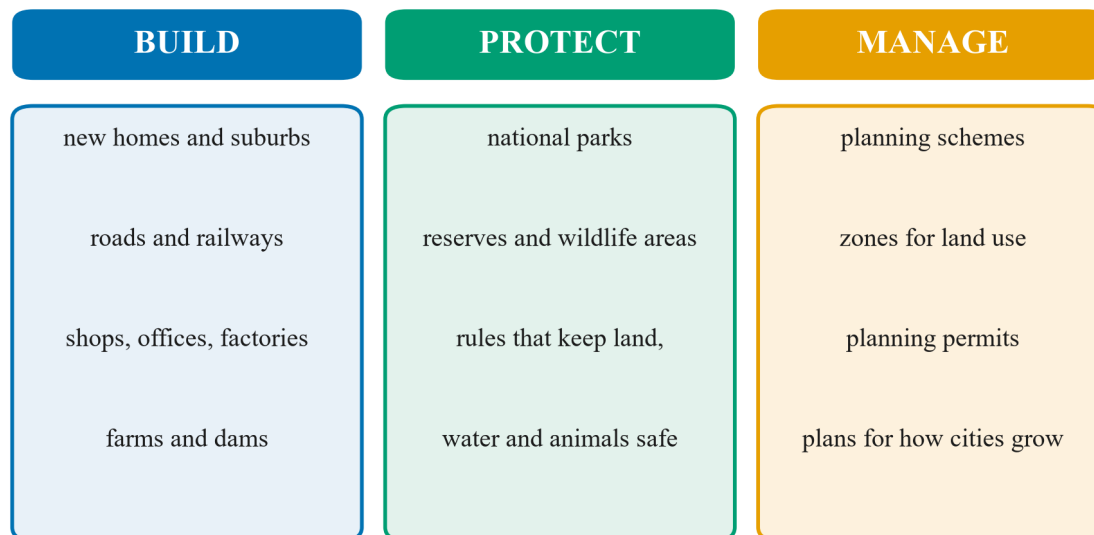
Figure 1A.1 — The three big ideas this section is built on (model diagram).

No place stays the same by itself. Places change because **people** change them — and people also decide what to keep the same. That two-way story, change and management, is this section.

Build, protect, manage

Nearly everything people do to places fits into three kinds of action, shown in Figure 1A.2: we **build** new things (homes, roads, farms), we **protect** land we want to keep (parks, reserves, wildlife areas), and we **manage** the rest with rules and plans.

Three ways people change and manage places



Every place in Victoria is being changed, protected or managed by people — usually all three at once.

Model drawn for this book. Examples are real kinds of change in Victoria.

Three columns labelled build, protect and manage, listing examples: build — new homes and suburbs, roads and railways, shops, offices, factories, farms and dams; protect — national parks, reserves and wildlife areas, rules that keep land, water and animals safe; manage — planning schemes, zones for land use, planning permits, plans for how cities grow.

Figure 1A.2 — Three ways people change and manage places (model diagram).

Every place in Victoria sits inside all three columns at once. Your school was built by one decision, is protected by fire and building rules, and is managed every day by the people who run it.

Zoning: deciding what goes where

In Victoria, every piece of land has a **zone**. *Zoning* is the way a planning scheme splits land into zones so that homes, shops, factories, farms and parks go where they should. Figure 1A.3 shows the zone families and some real zone names used in Victorian planning schemes.

Zones in Victorian planning schemes — some real examples

Zone family	What the land is used for	Real zone name
Residential	Homes and gardens	General Residential Zone — most of Melbourne's suburbs
Commercial	Shops, offices and services	Commercial 1 Zone — shopping strips and town centres
Industrial	Factories and places to store goods	Industrial 1 Zone
Farming	Crops and farm animals	Farming Zone — across country Victoria
Parks and protected land	National parks and reserves	Public Park and Recreation Zone
New growth areas	New suburbs being planned	Urban Growth Zone — Melbourne's growth areas
Green wedges	Farming and open land kept clear of new suburbs	Green Wedge Zone — outside Melbourne's urban growth boundary

Every piece of land in Victoria has a zone. Zones are set in each local planning scheme, using rules written by the Victorian Government.

Zone names: Victoria Planning Provisions (Victorian Government). Framework: Planning and Environment Act 1987 (Vic), as described in Wikipedia, 'Planning and Environment Act 1987', viewed 25 August 2026.

Table of zone families in Victorian planning schemes with real zone names: residential (General Residential Zone), commercial (Commercial 1 Zone), industrial (Industrial 1 Zone), farming (Farming Zone), parks and protected land (Public Park and Recreation Zone), new growth areas (Urban Growth Zone), green wedges (Green Wedge Zone).

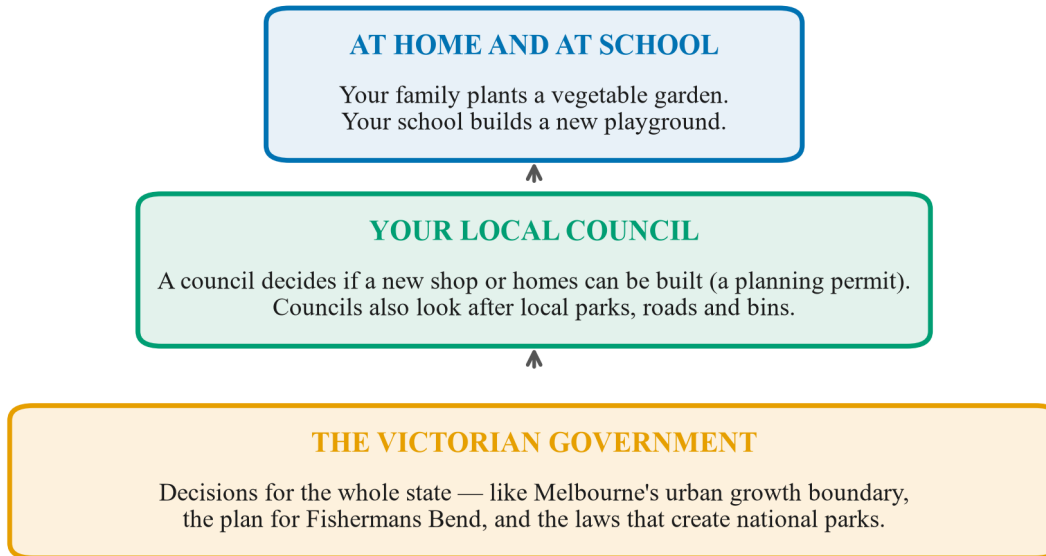
Figure 1A.3 — Zone families and real zone names in Victoria (zone names: Victoria Planning Provisions; framework law: Planning and Environment Act 1987 (Vic); retrieved 25 August 2026).

The zoning system is set up by a Victorian law, the **Planning and Environment Act 1987**. Under that law, each local council writes a planning scheme for its area. If you want to build or change most things, you need a **planning permit** — the council's written permission, checked against the zone rules.

Who decides? Decisions at different scales

Not every decision is made by the same people. *Scale* means how big an area a decision covers. Figure 1A.4 shows three scales: decisions at home and at school, decisions by your local council, and decisions by the Victorian Government for the whole state.

Decisions about places happen at different scales



Scale = how big an area a decision covers.

Three boxes from small to large: at home and at school; your local council; the Victorian Government — showing that decisions about places happen at different scales.

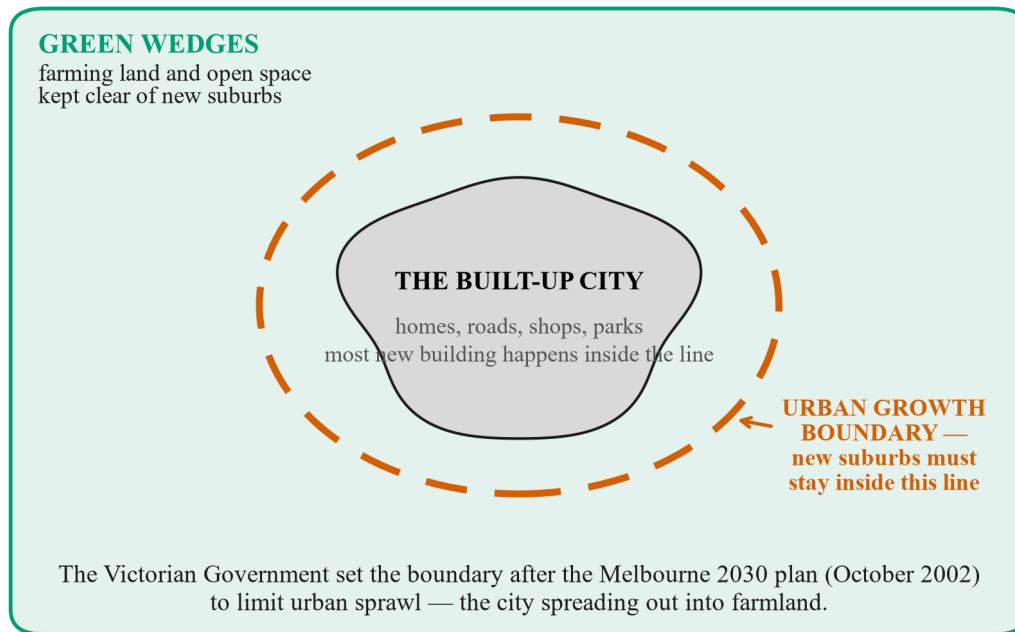
Figure 1A.4 — Decisions about places happen at different scales (model diagram).

A family decides what to plant in its garden. A council decides whether a new shop can be built on the corner, and looks after local parks and roads. The Victorian Government makes the biggest decisions — the urban growth boundary, plans like Fishermans Bend, and the laws that create national parks.

Keeping the city in: the urban growth boundary

When a city keeps spreading out into farmland, that spread is called *urban sprawl*. Sprawl eats farming land, and long roads and pipes must be built to reach the new suburbs. To limit it, the Victorian Government drew a line around Melbourne: the **urban growth boundary** (Figure 1A.5). New suburbs must stay inside the line. Outside it, **green wedges** keep farming land and open space clear of new suburbs. The boundary was set soon after the **Melbourne 2030** plan of October 2002.

Melbourne's urban growth boundary — a simple model (not to scale)



'Urban growth boundary' and 'Melbourne 2030' (Wikipedia), viewed 25 August 2026. Model drawn for this book.

Model map of Melbourne's urban growth boundary: a built-up city inside a dashed line, with green wedges of farming land and open space outside the line.

Figure 1A.5 — Melbourne's urban growth boundary, a simple model (boundary facts: 'Urban growth boundary' and 'Melbourne 2030', Wikipedia; retrieved 25 August 2026).

A big decision: Fishermans Bend

Figure 1A.6 shows one of Victoria's biggest planning decisions. Fishermans Bend is old industrial land next to Melbourne's city centre. The Victorian Government and the two local councils — the City of Melbourne and the City of Port Phillip — decided to change it into a new part of the city. The plan, the **Fishermans Bend Framework**, sets out homes, jobs, shops and parks in stages out to 2055.

A big planning decision: Fishermans Bend, Melbourne

Australia's biggest urban renewal project

about 4.8 square kilometres of land

the size of the project area

80,000 people

planned to live there by 2050

80,000 jobs

planned there by 2050

15,000 new homes

planned for the first stages

Fishermans Bend is old industrial land next to Melbourne's city centre, in the City of Melbourne and the City of Port Phillip. The Victorian Government and the two councils decided to change it into a new part of the city — homes, jobs, shops and parks. The plan is called the Fishermans Bend Framework. Work is planned in stages over three ten-year periods, out to 2055.

State of Victoria, 'Fishermans Bend', vic.gov.au, viewed 25 August 2026.

Case card for Fishermans Bend, Melbourne: about 4.8 square kilometres, 80,000 people and 80,000 jobs planned by 2050, 15,000 new homes in the first stages.

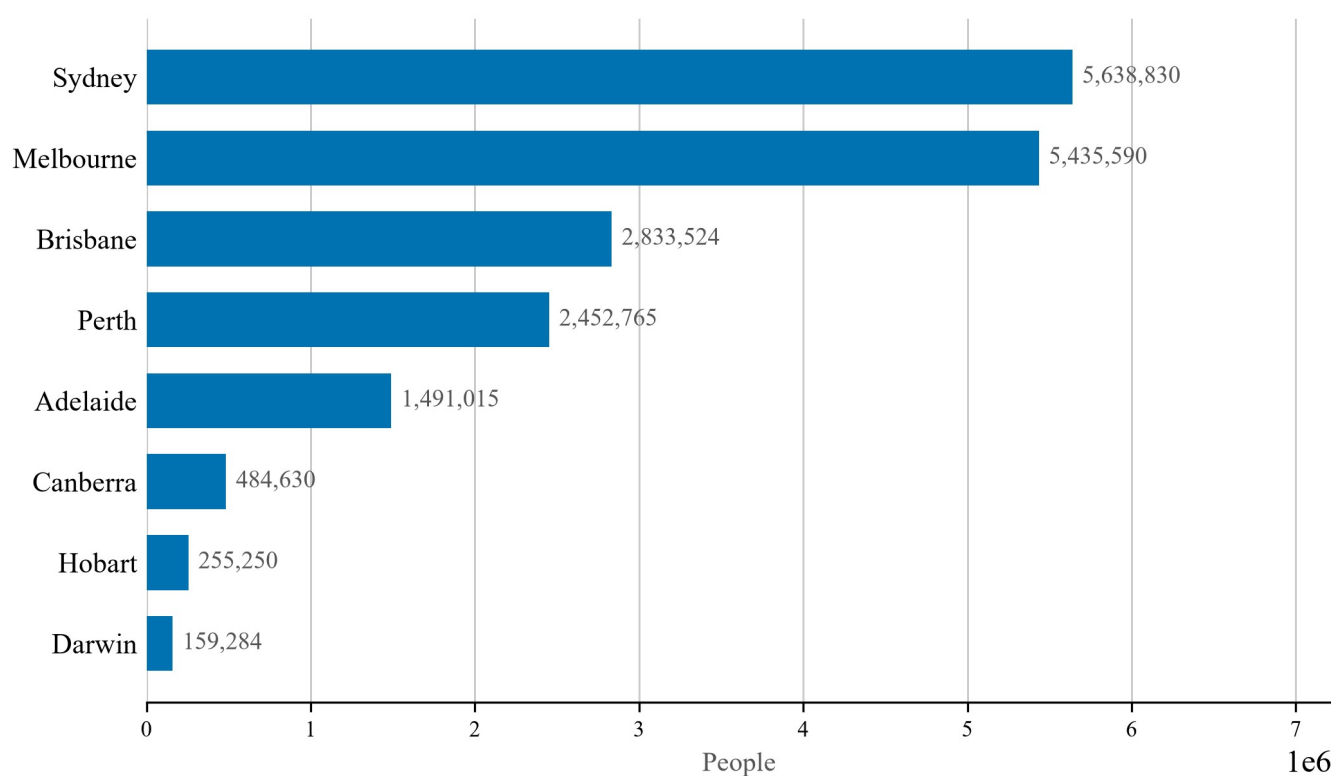
Figure 1A.6 — The Fishermans Bend decision (source: State of Victoria, 'Fishermans Bend', vic.gov.au; retrieved 25 August 2026).

Notice where Fishermans Bend sits: **inside** the urban growth boundary. Instead of sprawling out into the green wedges, Melbourne is renewing old land it already had. That is management as well as change.

Urbanisation: Australia's growing cities

Urbanisation is the growth of cities and towns as more and more people come to live in them. Figure 1A.7 shows how many people live in Australia's eight capital cities, and Figure 1A.8 shows how much each city grew in one year, 2024-25.

People living in Australia's eight capital cities, 30 June 2025

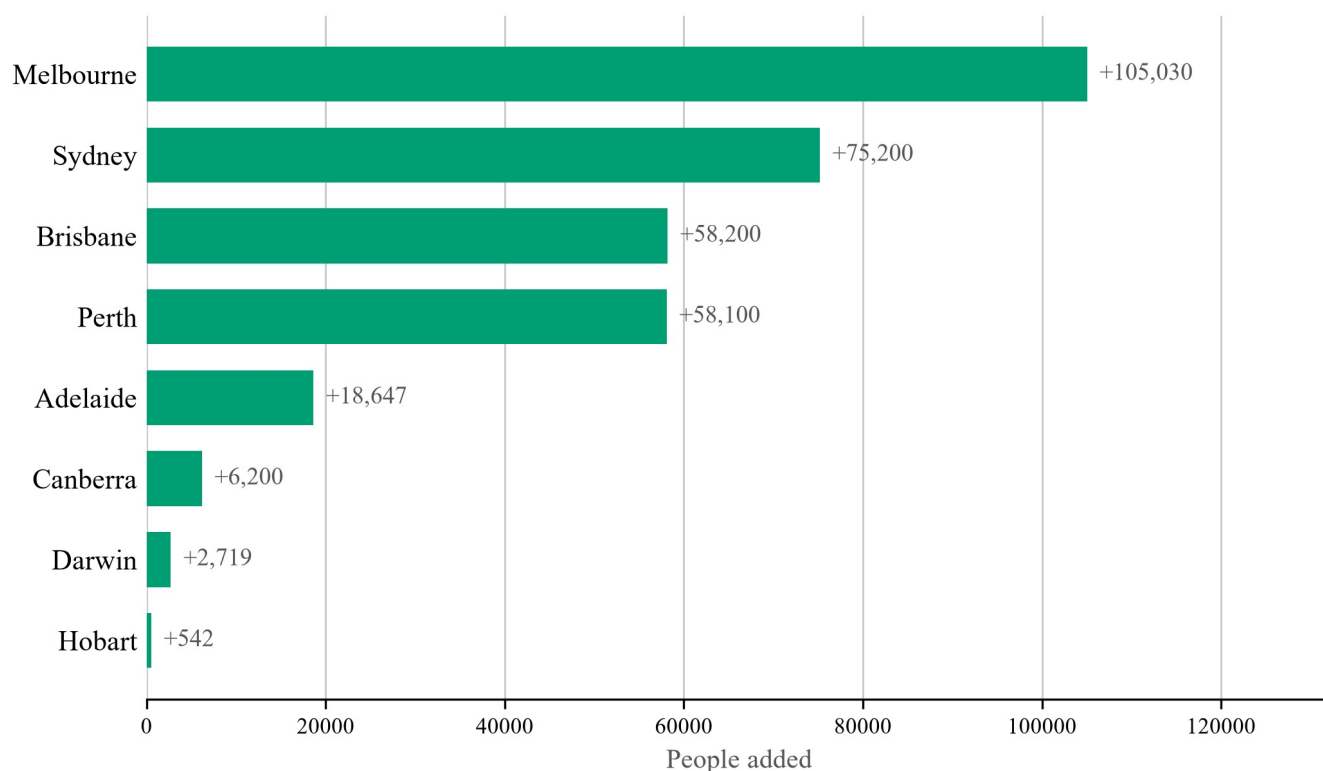


Source: ABS, Regional population, 2024-25 (cat. no. 3218.0, published 31 March 2026), viewed 25 August 2026.

Horizontal bar chart of people living in Australia's eight capital cities at 30 June 2025: Sydney 5,638,830; Melbourne 5,435,590; Brisbane 2,833,524; Perth 2,452,765; Adelaide 1,491,015; Canberra 484,630; Hobart 255,250; Darwin 159,284. Source line on the figure: ABS, Regional population, 2024-25.

Figure 1A.7 — People living in Australia's eight capital cities, 30 June 2025 (source: ABS, Regional population, 2024-25, cat. no. 3218.0, published 31 March 2026; retrieved 25 August 2026).

How much each capital city grew in 2024-25



Source: ABS, Regional population, 2024-25 (cat. no. 3218.0, published 31 March 2026), viewed 25 August 2026.

Horizontal bar chart of how much each capital city grew in 2024-25: Melbourne +105,030; Sydney +75,200; Brisbane +58,200; Perth +58,100; Adelaide +18,647; Canberra +6,200; Darwin +2,719; Hobart +542. Source line on the figure: ABS, Regional population, 2024-25.

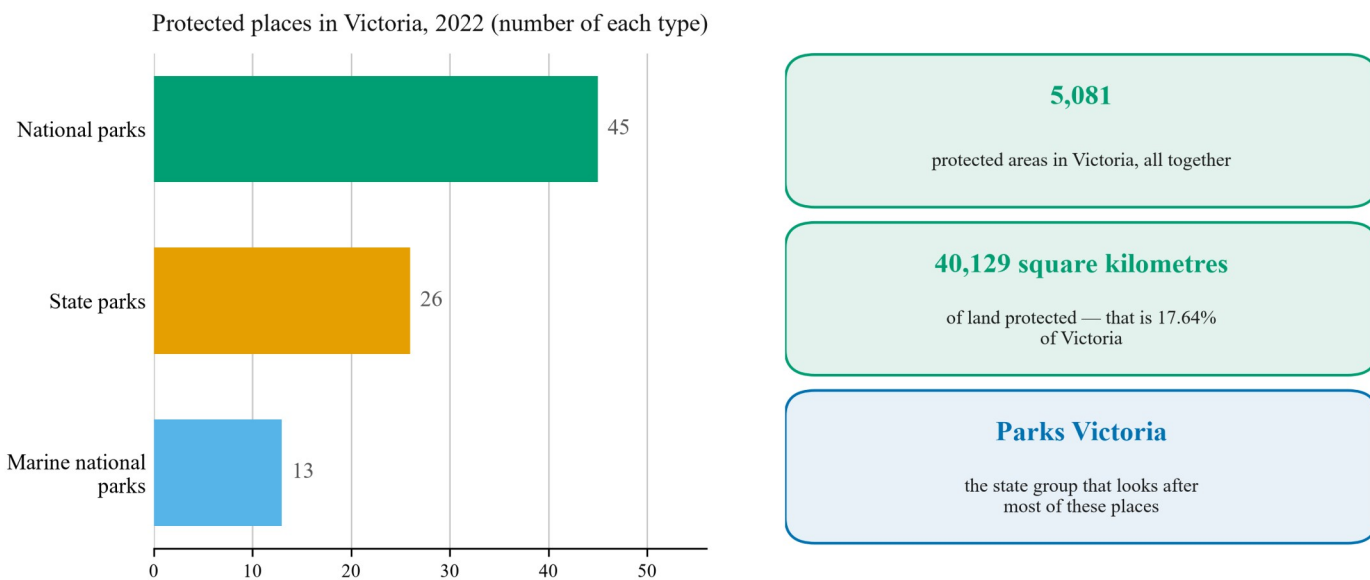
Figure 1A.8 — Capital city growth, 2024-25 (source: ABS, Regional population, 2024-25, cat. no. 3218.0, published 31 March 2026; retrieved 25 August 2026).

Read Figure 1A.8 carefully. **Melbourne grew the most of any Australian capital city** — 105,030 more people in one year. That is like a whole new town arriving: new homes, new school students, new shoppers, new workers. Urbanisation is not only a capital-city story, though: in the same year, the rest of Victoria (the towns outside Melbourne) grew by 17,900 people.

Where do the new people live? Most of them inside the growth boundary — in new suburbs in the growth areas, and in renewal projects like Fishermans Bend. Zoning and the boundary are how Victoria **manages** urbanisation.

Land protection: national parks

People change places by protecting them, too. Figure 1A.9 shows Victoria's protected areas: 5,081 of them in all, covering 40,129 square kilometres — 17.64% of the state. **Parks Victoria** is the state group that looks after most of these places.



Source: CAPAD 2022 data, as published in 'Protected areas of Victoria' (Wikipedia), viewed 25 August 2026. Area shown in square kilometres.

Bar chart and tiles: 45 national parks, 26 state parks and 13 marine national parks in Victoria in 2022; 5,081 protected areas in all; 40,129 square kilometres protected, 17.64% of Victoria; Parks Victoria looks after most of them. Source line on the figure: CAPAD 2022.

Figure 1A.9 — Protected places in Victoria, 2022 (source: CAPAD 2022 data, as published in 'Protected areas of Victoria', Wikipedia; retrieved 25 August 2026).

One of those parks is **Wilsons Promontory National Park**, shown in Figure 1A.10. It is a real story of land protection: reserved in 1898, made permanent in 1908, and protected by law ever since.

Land protection in action: Wilsons Promontory National Park



In July 1898, the Victorian Government reserved this wild coast as a national park, and in 1908 the park was made permanent. Today it is protected by law. The park is known for its rainforests, beaches and wildlife, and its coast has coves, beaches and granite cliffs.

Why protect it? Once land becomes a national park, rules stop people building on it or harming its plants and animals — so it stays wild for everyone to enjoy.

'Wilsons Promontory National Park' (Wikipedia), viewed 25 August 2026.

Case card for Wilsons Promontory National Park: first reserved in 1898, made permanent in 1908, 505 square kilometres, about 157 km south-east of Melbourne.

Figure 1A.10 — Land protection in action: Wilsons Promontory National Park (source: 'Wilsons Promontory National Park', Wikipedia; retrieved 25 August 2026).

Managing for the future

The last big idea is *sustainability*: using and looking after places now so that they will still be good places — for people, plants and animals — a long way into the future. The green wedges, the national parks and the urban growth boundary are all examples of Victoria managing change sustainably. When you work the tasks below, keep asking two questions: **what did people change, and how are people managing that change?**

Worked examples

Example 1 — with help: reading a real planning decision (Fishermans Bend)

Task: use Figures 1A.3, 1A.5 and 1A.6 to describe how decisions about where new things are built, and about zoning, changed one real place. Work through the table.

Step	Working	Comment
1	What was there before? Old industrial land next to Melbourne's city centre — factories and a lot of empty land.	Read the case card's first lines.
2	Who decided? The Victorian Government together with the City of Melbourne and the City of Port Phillip.	Figure 1A.4 shows this is a state-scale decision shared with two councils.
3	What did they decide? A new part of the city: homes for 80,000 people, 80,000 jobs by 2050, 15,000 new homes in the first stages.	Read the tiles on Figure 1A.6.
4	Where does zoning show up? The plan says which land is for homes, which is for shops and jobs, and which is for parks — the same zone families as Figure 1A.3.	Zoning is the decision about what goes where.
5	Where does the boundary show up? Fishermans Bend is inside the urban growth boundary: renewal of old land, not sprawl into the green wedges.	Figure 1A.5. The boundary and the plan work together.

Closing sentence of the model: *Fishermans Bend shows that a place's characteristics — what is built there, who lives there, what jobs are there — come from decisions people made about new developments and zoning.*

Example 2 — with help: urbanisation and land protection in the same year

Task: use Figures 1A.8 and 1A.9 to show that people changed Victoria in two opposite ways in 2024-25 — by growing its cities and by keeping land protected.

Step	Working	Comment
1	Read Figure 1A.8: Melbourne +105,030 people; Sydney +75,200.	The two longest bars.
2	Difference: $105,030 - 75,200 = 29,830$.	Melbourne grew nearly 30,000 more people than Sydney in one year.
3	Is it only a capital-city story? No — the rest of Victoria grew by 17,900 in the same year.	Urbanisation reaches country towns too.
4	Now the protection side: 17.64% of	While cities grew, 17.64% of the

Step	Working	Comment
	Victoria is protected land (Figure 1A.9).	state stayed protected.
5	A real protected place: Wilsons Promontory — reserved 1898, permanent 1908, 505 square kilometres (Figure 1A.10).	Protection is a decision too, and this one has lasted over 100 years.

Closing sentence of the model: *In one year, people grew Melbourne by 105,030 and kept 17.64% of Victoria protected — building and protecting are both ways people change and manage places.* That sentence pattern (evidence → change → management) is the one to use in the writing task at the end.

Practice tasks

Practice with help

Q1. Look at Figure 1A.1. (a) Name the three big ideas. (b) Which idea means “how a place becomes different over time”?

Q2. Look at Figure 1A.2. Sort these four examples under build, protect or manage: (a) a new suburb of 2,000 homes; (b) a national park where building is not allowed; (c) a council giving a planning permit for a corner shop; (d) a new dam for farm water.

Q3. Look at Figure 1A.3. (a) Which real zone name covers most of Melbourne’s suburbs? (b) Which zone family is for factories and places to store goods? (c) Which zone keeps farming land clear of new suburbs?

Q4. Look at Figure 1A.4. (a) Which scale decided Melbourne’s urban growth boundary? (b) Who gives the planning permit for a new local shop? (c) Name one decision your school makes about its own place.

Q5. Look at Figure 1A.5. (a) Where must new suburbs stay? (b) What is kept clear of new suburbs outside the line? (c) What is the geography word for a city spreading out into farmland?

Q6. Look at Figure 1A.6. (a) How big is the Fishermans Bend project area? (b) How many people are planned to live there by 2050? (c) Name the two councils that share the decision with the Victorian Government.

Q7. Look at Figure 1A.7. (a) Name the biggest and the smallest capital cities by population. (b) How many more people lived in Melbourne than in Brisbane at 30 June 2025? Show your working.

Q8. Look at Figure 1A.8. (a) Which capital city grew the most in 2024-25? (b) How much more did it grow than Sydney? Show your working. (c) Which capital city grew the least?

Practice on your own

Q9. Using Figures 1A.6 and 1A.8, write three to four sentences describing how decisions by people are changing Melbourne. Underline one piece of evidence in what you write.

Q10. A zoning walk. Think of your own town or suburb. Name one place that fits each zone family: residential, commercial, and parks and protected land (Figure 1A.3). For each, say one reason the zone fits that place.

Q11. Protection. Choose Wilsons Promontory (Figure 1A.10) or a park you know. In three to four sentences, explain why rules protect it and what would change there if the rules were removed.

Q12. Debate preparation: “Melbourne should be allowed to spread past its urban growth boundary.” Write two sentences for the idea and two sentences against it. Use at least one number from a figure in this section on each side.

Evidence-based writing task

Our place, changed and managed. Write one paragraph (5–7 sentences) about your own town or suburb. Include: (1) one way people have **changed** your place and one way people **manage or protect** it; (2) the evidence for each — something you can see, or a number from a figure in this section; (3) one sentence saying whether each change is sustainable, and why. Underline your two pieces of evidence. This paragraph is your first evidence draft for the local study you will build in Section 1C.

Answers and suggested responses

Q1. (a) Place, environment, change. (b) Change.

Q2. (a) Build. (b) Protect. (c) Manage. (d) Build.

Q3. (a) General Residential Zone. (b) Industrial (Industrial 1 Zone). (c) Green Wedge Zone.

Q4. (a) The Victorian Government (state scale). (b) The local council. (c) Answers vary — for example, where a new playground or garden goes.

Q5. (a) Inside the urban growth boundary. (b) Green wedges — farming land and open space. (c) Urban sprawl.

Q6. (a) About 4.8 square kilometres. (b) 80,000. (c) The City of Melbourne and the City of Port Phillip.

Q7. (a) Biggest: Sydney; smallest: Darwin. (b) $5,435,590 - 2,833,524 = 2,602,066$ more people in Melbourne.

Q8. (a) Melbourne (+105,030). (b) $105,030 - 75,200 = 29,830$ more people. (c) Hobart (+542).

Q9. Responses vary. Check: a decision is named (the Fishermans Bend plan, the growth boundary, new suburbs), one figure number is underlined (for example, 80,000 people or +105,030), and the sentences say how the place changes.

Q10. Responses vary. Check: one real place per zone family, and a reason that fits the zone (for example, the shopping strip is commercial because shops and offices are what that zone is for).

Q11. Responses vary. Check: the reason for protection (plants, animals, wild coast kept safe) and a named change if rules were removed (building, loss of wildlife areas).

Q12. Suggested — for: Melbourne grew by 105,030 people in one year and those people need homes; the growth areas inside the line will fill up. Against: spreading past the line would eat farming land and green wedges; renewal inside the line (Fishermans Bend) and country towns (which grew by 17,900) can take much of the growth.

Writing task. Check for the three required parts: one change and one management or protection example, evidence for each (seen or sourced, underlined), and a sustainability sentence. Mark on the reasoning, not the conclusion reached.

Interconnection: how places change each other

For the teacher

Owens: VC2HG6K02 (Geographical Knowledge and Understanding, Management of places). **Draws on:** .E01, .E02. **Achievement standard:** the world-scale knowledge belongs to 2A/2B; this section builds the concept, the evidence habits and the local/national scale.

Teaching sequence: 1. Revisit *place* and name *characteristics*. 2. Define *interconnection* and model the four flows (Figure 1B.1). 3. Use real ABS data to show Australia’s connections in goods, people and visitors (Figures 1B.2–1B.5). 4. Work Example 1 to show that “closest” is a frame question — trade, migration and visitors rank countries differently, and no frame is the wrong one. 5. Work Example 2 as a model text linking connections to changes in a place’s characteristics. 6. Students run the evidence checklist (Figure 1B.7) on their own place, then attempt the “Practice with help” and “Practice on your own” tasks. 7. Close with the evidence-based writing task (this feeds 1C’s local study and 4C’s exit standard).

Vocabulary notes: the terms *place*, *characteristics*, *interconnection*, *trade*, *exports*, *imports*, *migration* and *visitors* are defined at first use in the student text; all other student-facing vocabulary is at or below Year 5. No First Nations content is required or used in this section (see the series front matter).

Theory

Places and their characteristics

A *place* is a part of Earth’s surface that people know and give a name to — your street, your town, your state. Every place has *characteristics*: the features that make it what it is. A place’s characteristics answer questions like these.

- Who lives here, and where were they born?
- What jobs do people do here?
- What do the buildings, streets and land look like?
- What food is eaten here, and what languages are heard here?
- What happens here — markets, festivals, sport?

No place is sealed off from the rest of the world. Your town is linked to other towns in Australia and to countries overseas, and those links help shape its characteristics.

Interconnection: the flows that link places

Interconnection is the geography word for the links between places. In this section, *interconnection* means the flows of people, goods, money and ideas that tie one place to another. The four flows are shown in Figure 1B.1.

Connections between places are flows

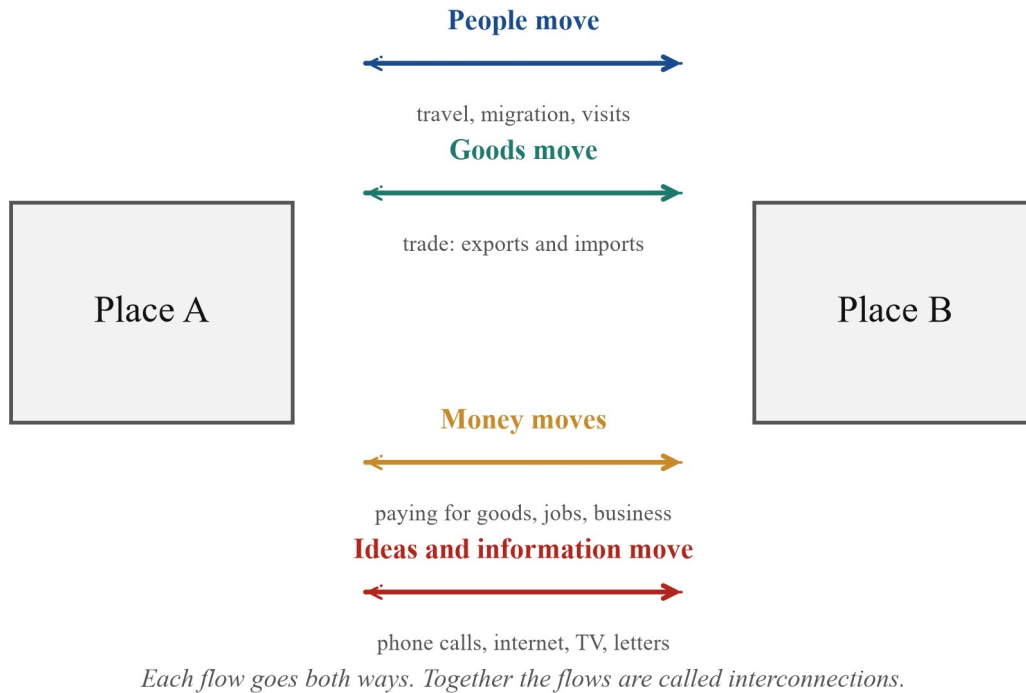


Diagram of two places, Place A and Place B, joined by four two-way flows labelled: people move (travel, migration, visits), goods move (trade, exports and imports), money moves (paying for goods, jobs and business), and ideas and information move (phone calls, internet, television, letters).

Figure 1B.1 — Connections between places are flows. Each flow goes both ways.

Some words in Figure 1B.1 need defining.

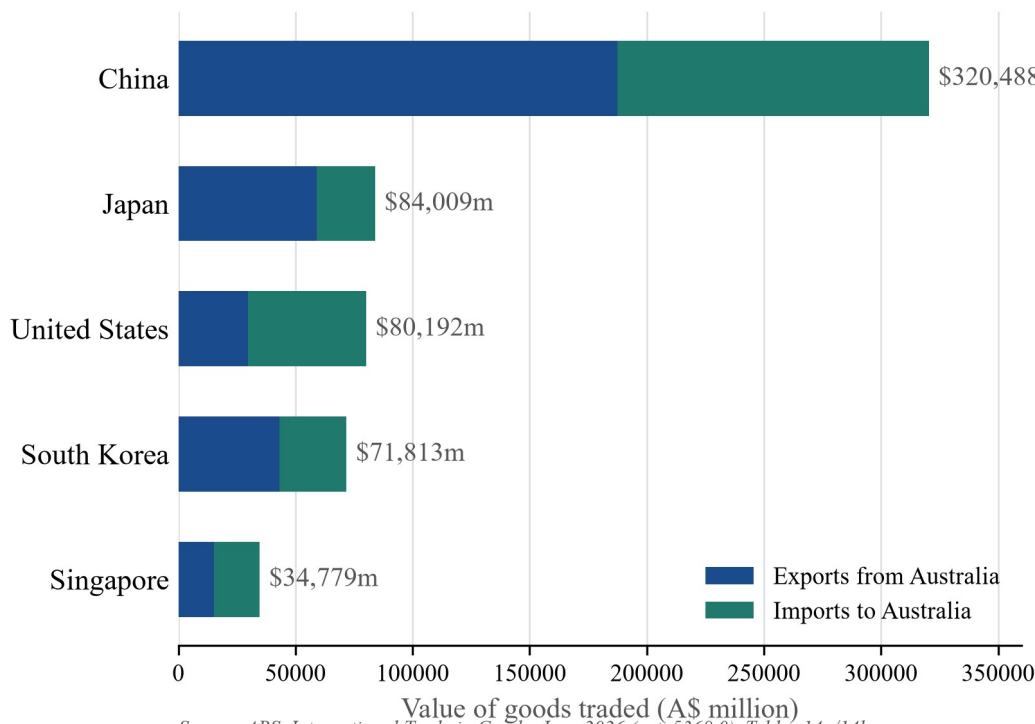
- When a place sends goods to another place, those goods are its **exports**.
- When a place brings goods in from another place, those goods are its **imports**.
- The buying and selling of goods between places is **trade**.
- **Migration** is people moving from one place to another to live.

Every flow goes both ways. Melbourne sends food to Singapore, and Singapore sends visitors to Melbourne. A town in Victoria sends wool overseas, and buys back cloth made from it. The flows are the interconnections.

Australia's goods connections, measured

One way to see which countries Australia is most strongly linked to is to measure trade in goods. Figure 1B.2 shows the value of goods Australia exported to, and imported from, its five biggest trading partners in 2025-26. The two parts of each bar add up to the total goods trade between Australia and that country.

Australia's top 5 trading partners for goods, 2025-26



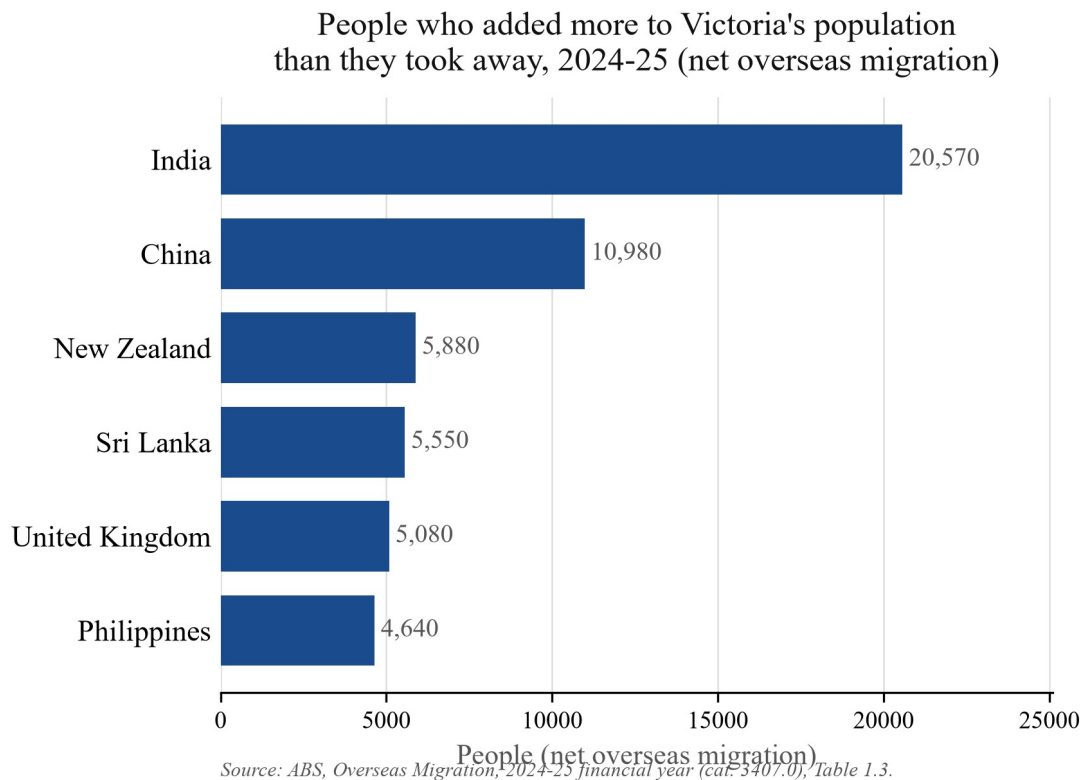
Horizontal stacked bar chart of two-way goods trade between Australia and its top five partners in 2025-26, split into exports and imports, in A\$ million: China about 320,488, Japan about 84,009, United States about 80,192, South Korea about 71,813, Singapore about 34,779. Source line on the figure: ABS, International Trade in Goods, June 2026.

Figure 1B.2 — Australia's top five trading partners for goods, 2025-26 (source: ABS, International Trade in Goods, June 2026, cat. 5368.0, Tables 14a and 14b; year values are the sums of the 12 published monthly figures; retrieved 25 August 2026).

Look at the size of China's bar. In 2025-26, Australia's two-way goods trade with China was \$320,488 million — almost twice the trade with Japan and the United States added together. On the trade measure, China is clearly Australia's closest goods partner. But trade is only one measure. A place's people links and visitor links can put countries in a different order — Worked Example 1 shows this.

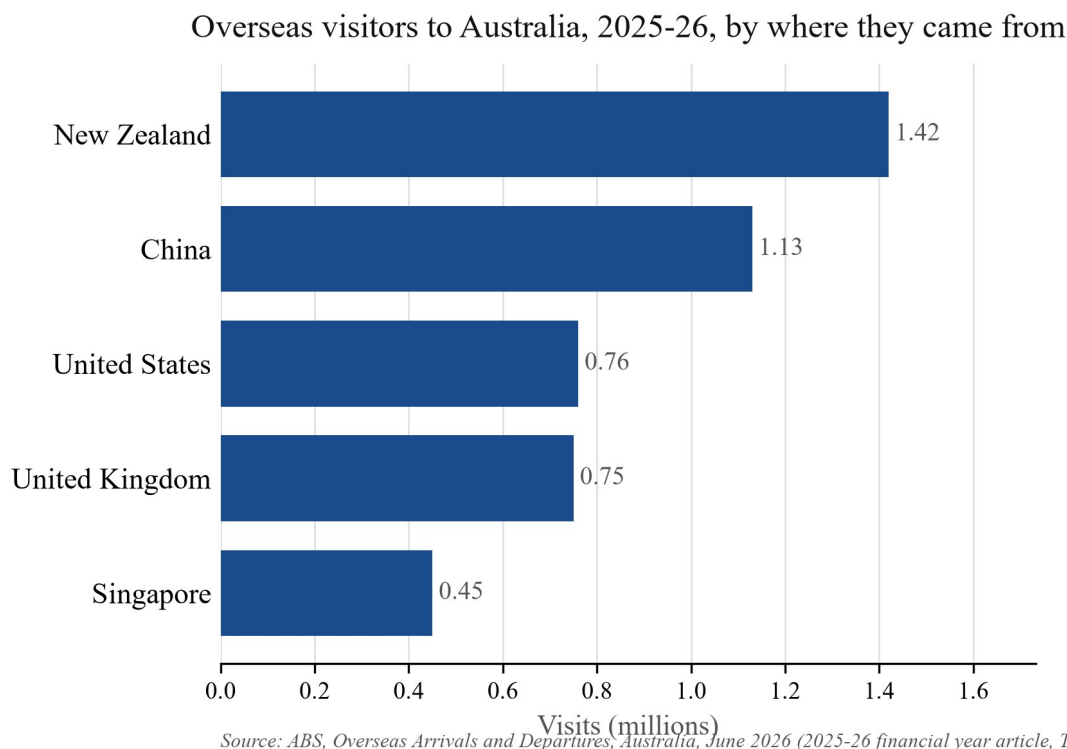
Australia's people connections, measured

Figure 1B.3 shows **net overseas migration** to Victoria in 2024-25: for each country of birth, how many more people born there moved to Victoria than left it. Figure 1B.4 shows where Australia's overseas visitors came from in 2025-26.



Horizontal bar chart of net overseas migration to Victoria in 2024-25 by country of birth: India 20,570; China 10,980; New Zealand 5,880; Sri Lanka 5,550; United Kingdom 5,080; Philippines 4,640. Source line on the figure: ABS, Overseas Migration, 2024-25 financial year, Table 1.3.

Figure 1B.3 — People who added more to Victoria's population than they took away, 2024-25 (source: ABS, Overseas Migration, 2024-25 financial year, cat. 3407.0, Table 1.3; retrieved 25 August 2026).



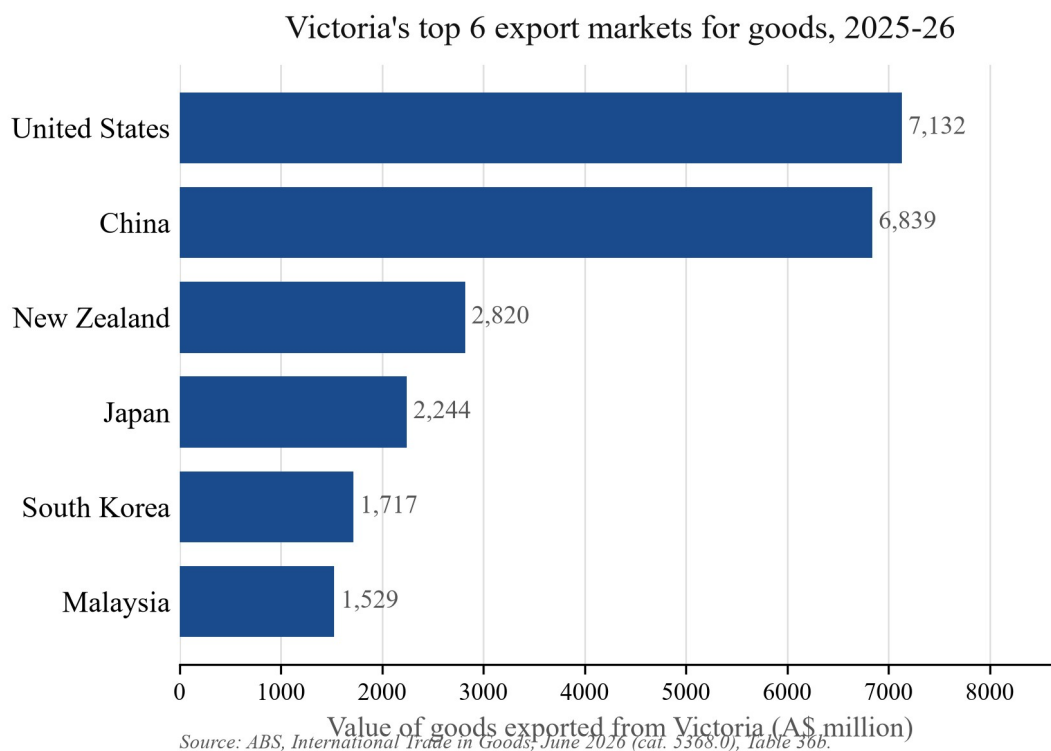
Horizontal bar chart of short-term visitor arrivals to Australia in 2025-26 by source country, in millions: New Zealand 1.42, China 1.13, United States 0.76, United Kingdom 0.75, Singapore 0.45. Source line on the figure: ABS, Overseas Arrivals and Departures, Australia, June 2026.

Figure 1B.4 — Overseas visitors to Australia, 2025-26, by source country (source: ABS, Overseas Arrivals and Departures, Australia, June 2026, 2025-26 financial year article, Table 1.5; retrieved 25 August 2026). In 2025-26 there were 9,101,120 visitor arrivals in all, and China was the largest source country for visitors to Victoria.

In 2024-25, more people born in India moved to Victoria than left it — a net gain of 20,570 people. That single number is a whole town’s worth of new families, homes, school students, workers and shoppers arriving from one country.

Victoria’s goods go out, too

Connections are not only national. Figure 1B.5 shows where goods made and grown in Victoria were sent in 2025-26.



Horizontal bar chart of goods exported from Victoria by market, 2025-26, in millions of dollars: United States 7,132; China 6,839; New Zealand 2,820; Japan 2,244; South Korea 1,717; Malaysia 1,529. Source line on the figure: ABS, International Trade in Goods, June 2026, Table 36b.

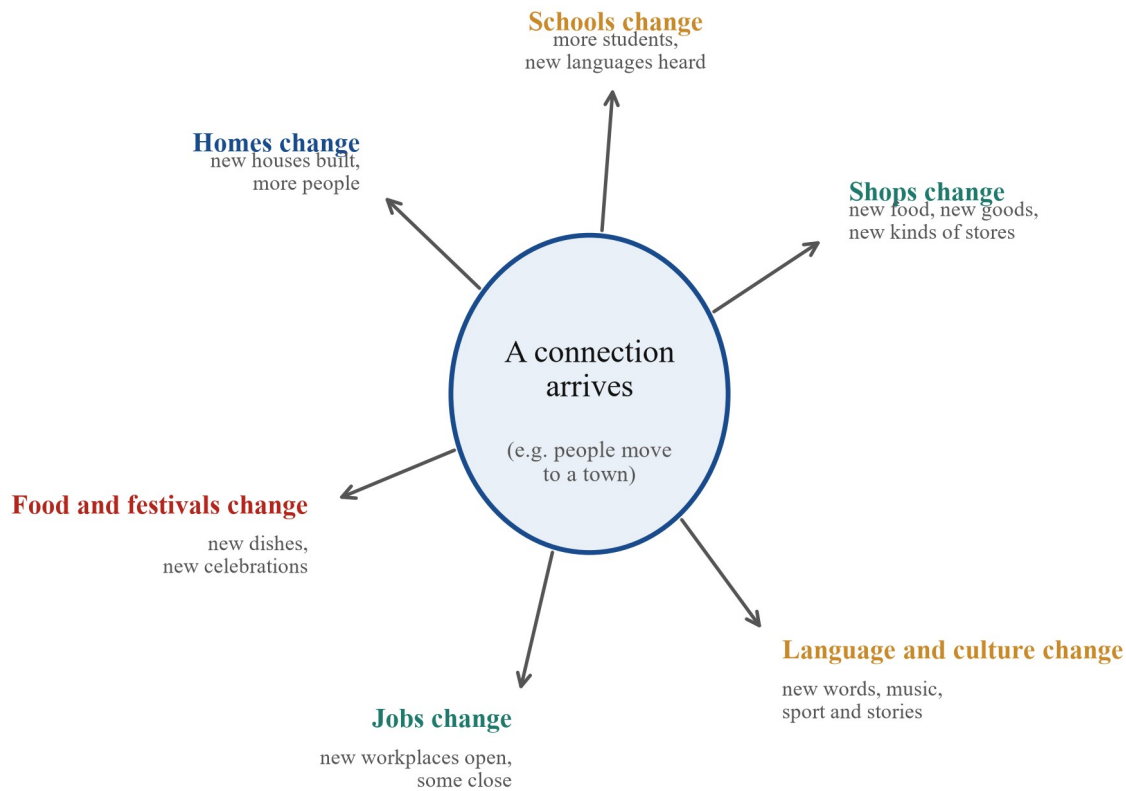
Figure 1B.5 — Victoria’s top six export markets for goods, 2025-26 (source: ABS, International Trade in Goods, June 2026, cat. 5368.0, Table 36b; retrieved 25 August 2026).

The Port of Melbourne is one of Australia’s busiest container ports, and much of Victoria’s farm produce — milk and cheese from Gippsland dairy farms, meat, wine and grain — leaves Australia from there. Within Australia, connections run the same way: fruit and vegetables grown in the Goulburn Valley travel to Melbourne’s markets, bananas grown in Queensland reach Victorian shops, and news made in Sydney is read in every state.

From connection to change

A connection does not just touch a place. It changes the place. Figure 1B.6 shows how one connection — for example, a group of people moving to a town — can change many of the town’s characteristics at once.

One connection, many changes to a place



Each connection can change many characteristics of a place - what it looks like, who lives there, and what happens there.

Consequence wheel: a circle labelled “a connection arrives (e.g. people move to a town)” with arrows out to six changes — shops change (new food, new goods, new kinds of stores), schools change (more students, new languages heard), homes change (new houses built, more people), food and festivals change (new dishes, new celebrations), jobs change (new workplaces open, some close), and language and culture change (new words, music, sport and stories).

Figure 1B.6 — One connection, many changes to a place’s characteristics.

This is the heart of the section: **interconnections between places change the characteristics of those places.** The people who arrive, the goods that come and go, the money that follows the trade, and the ideas that travel with all of them — each leaves its mark on what a place is like.

Finding connections in your own place

You can see interconnection with your own eyes. Figure 1B.7 is an evidence checklist to use in your own town or suburb.

An evidence checklist: finding connections in your own place

Where to look	What you might find	What it can show
Shops and markets	foods and goods from other places and countries	goods that travel to your place
Street signs and restaurants	names and dishes in other languages	people who have moved to your place
School and sports clubs	classmates born overseas, games from other countries	people and ideas that have moved
News and letterbox	stories about places far away, parcels from overseas	money, goods and ideas that travel
Airport, port, train and highway signs	trucks, ships and planes carrying goods	the routes your place's goods travel

Use this checklist with a family member or your class. Record what you find and what each clue shows.

Table titled “An evidence checklist: finding connections in your own place” with three columns — where to look, what you might find, what it can show — and rows for shops and markets, street signs and restaurants, school and sports clubs, news and the letterbox, and airport, port, train and highway signs.

Figure 1B.7 — An evidence checklist for your own place.

Worked examples

Example 1 — with help: which country is Australia’s closest partner?

The question “which country has the closest relationship with Australia?” sounds like it has one right answer. It does not — until you say how you will measure “closest”. Here we try two measures and compare the results.

Working	Comment
Measure 1 — goods trade (Figure 1B.2): China \$320,488m, Japan \$84,009m, USA \$80,192m. China (\$320,488m) is almost twice Japan and the USA added together (\$84,009m + \$80,192m = \$164,201m). So on the trade measure, China is Australia’s closest goods partner.	Read the totals at the end of each bar. Check: $\$164,201\text{m} \times 2 = \$328,402\text{m}$, just above \$320,488m, so China is a little under twice the pair. First frame answered.
Measure 2 — visitors (Figure 1B.4): New Zealand 1.42m, China 1.13m. So on the visitor measure, New Zealand is Australia’s closest partner.	Read the two longest bars. Second frame answered.

Working	Comment
The two measures give two different “closest” countries — and both answers are correct for their measure.	“Closest” is a frame question. Trade, migration and visitors each put countries in a different order. A good debater says which measure they are using.

Impacts on places. The China–Australia goods connection shaped real places. Most of the iron ore mined in Western Australia’s Pilbara region is sold to China, and Pilbara towns such as Port Hedland grew around that trade. The New Zealand–Australia visitor connection shapes real places too: beaches and airports on the Gold Coast and the Sunshine Coast see New Zealand visitors all year, and many shops and cafés there are used to them.

Example 2 — with help: tracing one place’s connections and their impacts

Task: use Figures 1B.3, 1B.4 and 1B.5 to explain how connections with other places change the characteristics of Melbourne and its state. Model response:

Connection (evidence)	Flow	A change it brings to the place
20,570 more India-born people moved to Victoria than left in 2024-25 (Figure 1B.3)	people	New homes built, new students in schools, Indian groceries and restaurants, Diwali and Holi celebrated in Melbourne streets.
China sent more visitors to Victoria than any other country in 2025-26 (Figure 1B.4 caption)	people	Shops, hotels and tours in central Melbourne shaped for Chinese-speaking visitors.
The USA and China were Victoria’s two biggest goods markets in 2025-26 (Figure 1B.5)	goods and money	Victorian farms and factories sell what they make; jobs in food making, ports and transport are tied to those buyers.

Closing sentence of the model: *Melbourne is the way it is in part because of places it has never met — the connections are part of the city’s characteristics.* That sentence pattern (evidence → flow → change) is the one to use in the writing task at the end.

Practice tasks

Practice with help

Q1. Look at Figure 1B.1. (a) Name the four flows that connect places. (b) For each flow, give one example from your own life this week.

Q2. Look at Figure 1B.2. (a) Which country had the largest two-way goods trade with Australia in 2025-26? (b) About how many times bigger was it than Australia’s trade with Singapore? Show your working with the numbers on the chart.

Q3. Look at Figure 1B.2 again. (a) With which partners did Australia’s exports (the dark blue part) look bigger than its imports? (b) With which partners did imports look bigger than exports?

Q4. Look at Figure 1B.5. (a) Name Victoria’s two biggest export markets. (b) What was the gap in value between them? Show your working.

Q5. Look at Figure 1B.3. (a) Name the top three countries of birth for net overseas migration to Victoria in 2024-25. (b) What does “net” mean in this chart?

Q6. Look at Figure 1B.4. (a) Name the top two source countries for visitors to Australia in 2025-26. (b) Which country sent the most visitors to Victoria?

Q7. Look at Figure 1B.6. Pick one connection from Figure 1B.3 (for example, the India-born arrivals). Name three of the wheel’s six changes that connection could bring to a Victorian suburb.

Q8. Frame practice. (a) On the goods-trade measure, name Australia’s closest partner. (b) On the visitor measure, name Australia’s closest partner. (c) In one sentence, say why a debate about “closest” needs to say which measure it is using.

Practice on your own

Q9. Choose one connection shown in Figures 1B.3–1B.5. Using the wheel in Figure 1B.6, write three sentences explaining how that connection changes the characteristics of the place it reaches.

Q10. Debate preparation: “The country with the closest relationship to Australia is China.” Using two different measures and at least two figures from this section, write for the motion and against the motion, two sentences each.

Q11. Your place and another Australian place. Pick a farming region (for example, the Goulburn Valley) and your own town or suburb. For each, name one connection within Australia and one connection overseas, and say one way each connection shapes that place.

Q12. “A new group of people arriving changes a place.” Do you agree? Use one number from a figure in this section and one observation of your own as your two pieces of evidence, and answer in three to four sentences.

Evidence-based writing task

Our place, connected. Write one paragraph (5–7 sentences) about your own town or suburb. Include: (1) one connection your place has within Australia and one connection it has with a country overseas; (2) the evidence for each connection — something you can see, or a number from a figure in this section; (3) one way each connection changes a characteristic of your place. Underline your two pieces of evidence. This paragraph is draft one of the local study you will build in Section 1C and present in Section 4C.

Answers and suggested responses

Q1. (a) People, goods, money, ideas and information. (b) Answers vary — for example, a relative who travelled (people), a toy made overseas (goods), pocket money spent on an imported game (money), a video call or a news story from another country (ideas).

Q2. (a) China. (b) $\$320,488\text{m} \div \$34,779\text{m} \approx 9.2$, so about nine times as big.

Q3. (a) China, Japan and South Korea (the dark blue part is the bigger half). (b) The United States and Singapore.

Q4. (a) The United States and China. (b) $\$7,132\text{m} - \$6,839\text{m} = \$293\text{m}$, a gap of just under \$300 million.

Q5. (a) India, China, New Zealand. (b) “Net” means the number left after you take the people who left away from the people who arrived — more people arrived than left.

Q6. (a) New Zealand, then China. (b) China.

Q7. Any three of: more homes built, more students and languages at school, new shops and groceries, new dishes and festivals, new workplaces and jobs, new words, music and sport. Each must be tied to the chosen connection.

Q8. (a) China. (b) New Zealand. (c) Suggested: different measures count different flows, so they can rank the same countries in different orders — naming the measure tells the listener what is being counted.

Q9. Responses vary. Award one mark per sentence that names (1) a real connection with its figure, (2) a flow type, (3) a change to a characteristic.

Q10. For: China is top of the trade measure by a long way, and top of Victoria’s visitor measure. Against: New Zealand tops the visitor measure nationally, and India tops Victoria’s migration measure — so “closest” depends on the measure.

Q11. Responses vary. Check: one within-Australia and one overseas connection named per place, and one characteristic change per connection (for example, Goulburn Valley produce sold in Melbourne and overseas; a suburban shop selling goods made in China).

Q12. Responses vary. Check: the response takes a side, uses one figure number (for example, 20,570 India-born net gain to Victoria) and one personal observation, and links them to changes such as shops, schools, homes or festivals.

Writing task. Check for the three required parts: two connections (one within Australia, one overseas), evidence for each (seen or sourced, underlined), and one characteristic change per connection. Mark on the reasoning, not the conclusion reached.

Your place: what shapes it, how it changes, and who manages the change

Look out of your classroom window. What can you see? Houses? Shops? A road with cars on it? Trees, a park, a creek or a bay? Everything you can see around you is part of your place.

In this section you will be a place detective. You will find answers to three big questions:

1. **What shapes your place?** What gives it the characteristics it has?
 2. **How is your place changing?** What is new, what is growing, and what is getting smaller?
 3. **How is change managed?** What rules and decisions help keep the change good for the people who live there?
-

The content description for this section

This section teaches one content description from the Victorian Curriculum Geography, Levels 5 and 6:

VC2HG6K03 (Geographical Knowledge and Understanding, Management of places)

It draws on three of the elaborations. (Elaborations are examples of how a content description can be taught.)

VC2HG6K03.E01 · VC2HG6K03.E02 · VC2HG6K03.E03

This section builds towards the Levels 5–6 Geography achievement standard. The three big questions above say exactly what you will learn.

Part 1 — What shapes a place?

Every place has its own character. Geographers sort the shapers of a place into three groups.

1. **The environment.** The natural parts of a place: its landforms (such as hills, bays and rivers), its climate (how warm or cool it is, and how much rain falls), and its water.
2. **Where it is.** A place's **relative location** is where it sits compared with other places — which direction they are, and how far away.
3. **Its connections with other places.** People, goods, jobs and ideas move between places. These links are called **interconnections**.

What shapes a place?

Three things work together to give a place its character.



A diagram showing the three groups of things that shape a place: the environment, where the place is, and its connections with other places

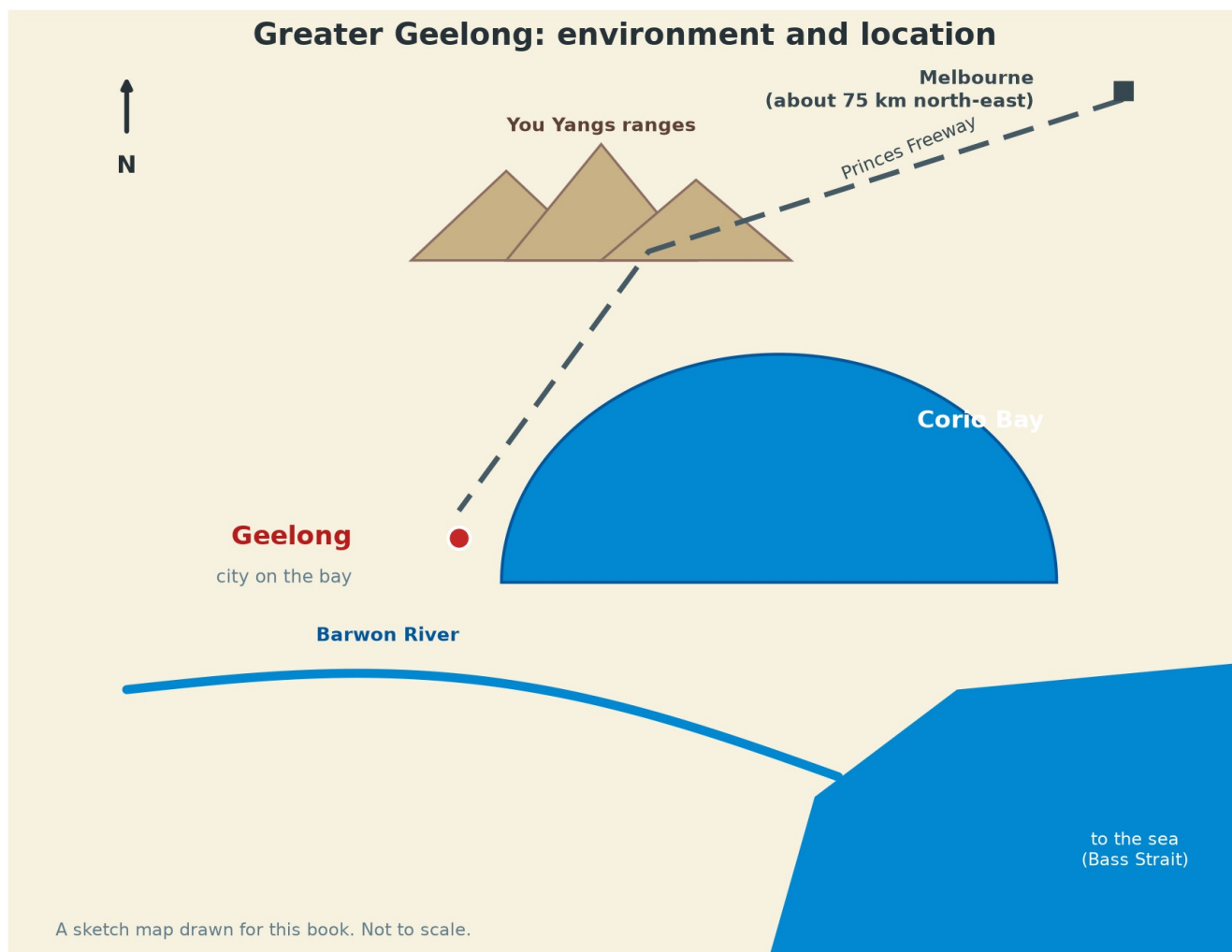
Figure 1 — The three groups of place shapers: the environment, where a place is, and its connections with other places.

Key ideas to remember

- **Relative location:** where a place is, compared with other places. Example: “Our school is a short walk south of the shops.”
- **Interconnections:** the links between places — people, goods, jobs, services and ideas moving both ways.

Worked example 1 — Greater Geelong: what shapes a real Victorian city

Let's put the three shapers to work on a real place: Greater Geelong, Victoria's second biggest city. Follow along on Figure 2 as you read.



A sketch map of Greater Geelong showing Corio Bay, the Barwon River, the You Yangs ranges, and the Princes Freeway running to Melbourne, about 75 kilometres away

Figure 2 — Greater Geelong: its environment and its location. Sketch map drawn for this book, not to scale.

The environment shapes Geelong. The city sits on Corio Bay, so water has always been part of life there. The Barwon River runs through the city, and the You Yangs ranges rise up to the north. Geelong’s climate brings warm summers and cool winters.

Where it is shapes Geelong. Geelong sits about 75 km from Melbourne, with Melbourne to its north east. The Princes Freeway and a railway line run between the two cities.

Its connections shape Geelong. Every day, people travel between Geelong and Melbourne for work. The port at Geelong moves goods in and out by ship. Visitors come to Geelong for the seaside, the shops and the footy.

Real numbers. In 2021, a national count of people and homes found that about 271,057 people lived in Greater Geelong, in about 120,584 homes.

Shaper	What we can see in Geelong
Environment	Corio Bay, the Barwon River, the You Yangs ranges, warm summers and cool winters
Where it is	About 75 km from Melbourne, with Melbourne to the north east
Connections	Workers, trains and the freeway to Melbourne; a port that moves goods; visitors

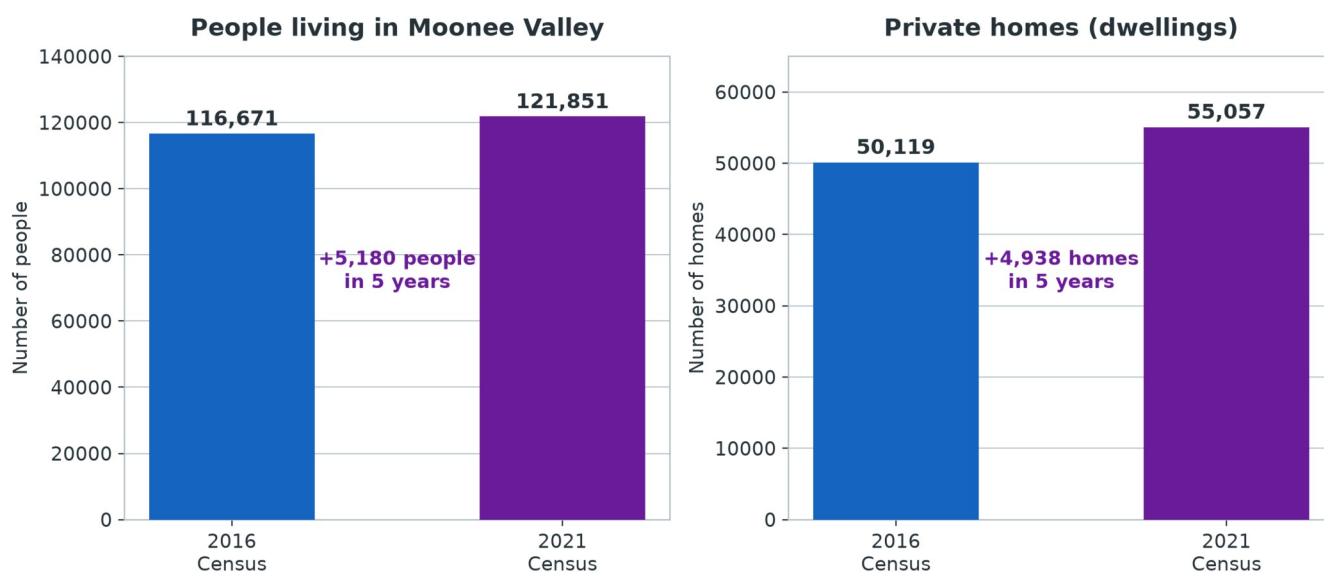
Your turn. Try the same three shapers on your own place. Name one natural part of your place. Say where your place sits compared with one other place. Name one connection your place has with another place.

Part 2 — How places change

Places never stand still. New people move in or out. New homes and shops are built. Old buildings are pulled down or put to a new use. Some changes are slow — a few extra homes each year. Some are fast — a new road, or a big building project.

Let's look at a real Victorian place: the City of Moonee Valley, in Melbourne's north. Between the national counts of 2016 and 2021, this place changed.

Change over time: City of Moonee Valley, Victoria



Source: Australian Bureau of Statistics, Census QuickStats for the City of Moonee Valley, 2016 and 2021. Retrieved 25 August 2026.

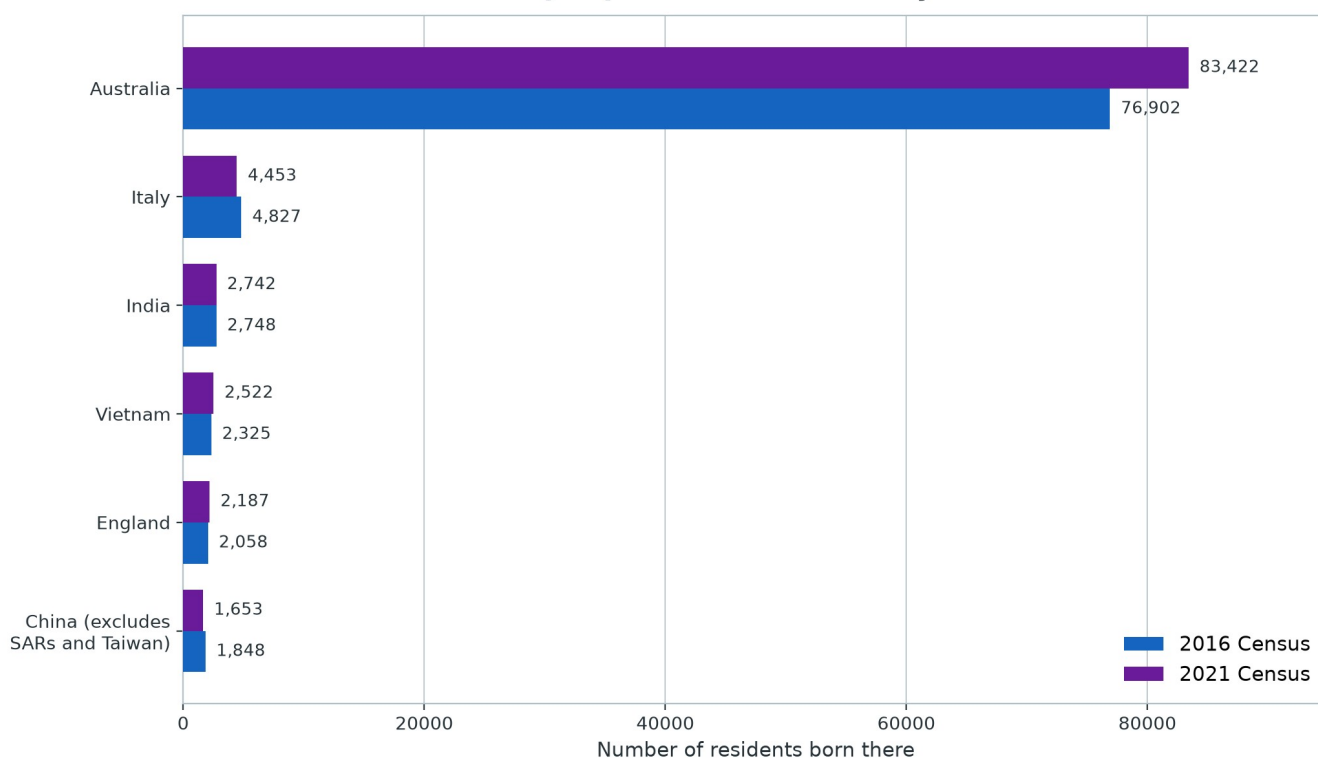
Two bar charts showing that the City of Moonee Valley grew between the 2016 and 2021 counts: from 116,671 to 121,851 people, and from 50,119 to 55,057 homes

Figure 3 — Change in the City of Moonee Valley, 2016 to 2021. Source: ABS, counts of people and homes for the City of Moonee Valley, 2016 and 2021. Retrieved 25 August 2026.

In five years, 5,180 more people lived in Moonee Valley, and there were 4,938 more homes.

Where did the new people come from? Some moved from other parts of Australia. Some arrived from other countries. When people move from one country to live in another, it is called **migration**. Figure 4 shows the birthplaces that people in Moonee Valley reported in 2016 and 2021.

Where do people in Moonee Valley come from?



Source: Australian Bureau of Statistics, Census QuickStats for the City of Moonee Valley, 2016 and 2021. Retrieved 25 August 2026.

A bar chart comparing the birthplaces reported by people in the City of Moonee Valley in the 2016 and 2021 counts, for Australia, Italy, India, Vietnam, England and China

Figure 4 — Birthplaces reported in the City of Moonee Valley, 2016 and 2021. Source: ABS, counts of people and homes for the City of Moonee Valley, 2016 and 2021. Retrieved 25 August 2026.

Reading Figure 4:

- More people in 2021 were born in **Australia** (up by 6,520), **Vietnam** (up by 197) and **England** (up by 129).
- Fewer people were born in **Italy** (down by 374), **China** (down by 195) and **India** (down by 6).

Change is not always growth. Some places get smaller: people move away, shops close, services go with them. No matter which way a place changes, the people there feel it. That is why change needs to be managed well.

Part 3 — How change is managed

When a place changes, people do not just let anything happen. In Victoria, change is managed with rules and decisions, so places stay good to live in — now and in the future. Looking after a place like this is called **sustainability**.

The rule book: the planning scheme. In Victoria, the rules about what can be built and where live in a **planning scheme** (a set of rules for how land can be used). The Victorian Government and each council write these rules.

Zones: the rules on a map. Every piece of land has a **zone**. A zone says what the land is mainly for. Giving land a zone like this is called **zoning**. Figure 5 is a model of how zoning works.

A model zoning map: where things go in a town

Zones decide what can be built where. (Model town — not a real place.)



What each zone is for

- Residential — where people live
- Commercial — shops and offices
- Industrial — factories and warehouses
- Open space — parks to play in
- Public use — school
- Roads — to get around

In Victoria, every piece of land has a zone set by the local planning scheme.

A model map of a small town with four zones: homes, shops and offices, factories, and open space, with a key showing the zone colours

Figure 5 — A model town showing zoning. This is a model, not a real place.

In Victoria's planning schemes, these zones have real names:

Zone in Figure 5	Real name in Victoria	Mainly for
Yellow	General Residential Zone	Homes
Orange	Commercial 1 Zone	Shops and offices
Purple	Industrial 1 Zone	Factories and places where things are made or stored
Green	Open space (parks and bushland)	Play, sport and nature

Why do zones matter? Factories can be noisy, so they sit in their own zone, away from homes. Shops want to be where people can get to them. Parks and bushland need protection, so they cannot just be built over.

Decisions: how a planning choice gets made. What happens when someone wants to build something new, or change a building? In Victoria, there are real steps to follow.

How a planning decision is made in Victoria



This is the real process used for planning decisions in Victoria.

A flow chart with six steps showing how a planning decision is made in Victoria: someone has a plan, the planning scheme is checked, a planning permit is requested, the community has a say, the council decides, and a review is possible

Figure 6 — The real steps of a planning decision in Victoria.

Two new words from Figure 6:

- A **planning permit** is permission from the council to build or change something on land.
- **Conditions** are extra rules the council can add when it says yes — for example, “building work only between 8 am and 5 pm.”

If someone thinks a decision was not right, a group called **VCAT** can look at the decision again to check it is fair. VCAT is short for the Victorian Civil and Administrative Tribunal, a Victorian body that reviews decisions.

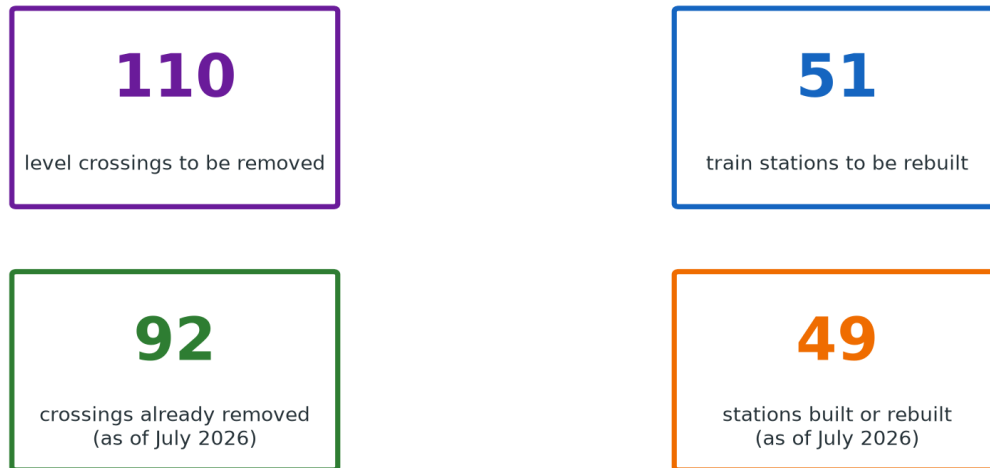
Worked example 2 — Removing level crossings: a real planning issue in Victoria

A **level crossing** is where a road crosses railway tracks at the same height. Boom gates come down to stop cars, bikes and people while a train goes through.

Victoria has a big, real project to remove level crossings. The numbers are large.

Case study: removing level crossings in Victoria

A level crossing is where a road crosses railway tracks at the same height.



The Victorian Government started this project in March 2015. It works in Melbourne suburbs including Croydon, Narre Warren, Parkdale and Ringwood East.

Source: Victorian Government Level Crossing Removal Project (levelcrossings.vic.gov.au), figures as of July 2026. Retrieved 25 August 2026.

Four big numbers about the Victorian project to remove level crossings: 110 crossings to be removed, 51 stations to be rebuilt, 92 crossings removed by July 2026, and 49 stations built or rebuilt by July 2026

Figure 7 — Victoria's Level Crossing Removal Project, in numbers. Source: Victorian Government Level Crossing Removal Project (levelcrossings.vic.gov.au), figures as of July 2026. Retrieved 25 August 2026.

Why is this a planning issue for places? Removing a crossing changes the place around it. A new station goes up. Boom gates go away, and cars no longer wait. Where the crossing was, there can be new open space. But the work takes time: roads close, the work is noisy, and shops nearby can lose customers while it goes on.

People see this issue in different ways. Both sides have real points.

One issue, two sets of views

Issue: should a busy level crossing near a shopping strip be removed?



Both sides have real points. A good class response listens to both before it decides.

Two columns of views on removing a level crossing near a shopping strip: views that support it, and views that raise concerns

Figure 8 — One issue, two sets of views. Both sides make real points.

How is this change managed? The Victorian Government runs the project. Each site is checked against planning rules, and the people who live nearby get a say before the work starts — just like the steps in Figure 6.

Your investigation — a planning issue near you

Now you will investigate a real planning issue in your own local area, the way VC2HG6K03.E03 describes. This investigation is also the seed for Section 4B, where you will use it again.

Step 1 — Choose an issue near you. With your class, choose one real planning issue in your local area. It could be:

- the redevelopment of a site (for example, new homes on an old site),
- the construction of a new road, crossing or path, or
- the protection of a unique environment (for example, a park, a creek or a patch of bushland).

Write your issue as a question: “Should _____ happen near our school?”

Step 2 — Look at the place. With your teacher, go and look at the place — or study a map and photos of it if you cannot visit. Record what you see. Going to a place to collect information about it is called **fieldwork**. (Section 3B will teach you more ways to do this well.)

What I saw (or saw on the map)

What it tells me about the place

Step 3 — Collect views. Find at least two views that support the plan and two views that raise concerns. For each view, ask: who might hold this view, and why?

View	A reason for the view	Who might hold it
Supports it		
Supports it		
Concerned about it		
Concerned about it		

Step 4 — Check how the change would be managed. What zone is the land in? Who would decide — the council or the government? Can the people who live nearby have a say?

Step 5 — Develop a class response. Talk it through together. Then agree on your class's response to the issue, with reasons. Keep your work — Section 4B will build on it.

Teaching sequence (for the teacher)

- Hook and big questions** (~20 min). Window observation: students list what they can see outside, and sort it into things that are natural and things that are built. Introduce the three questions of the section and Figure 1. Define *relative location* and *interconnections* at first use.
- Worked example 1: Greater Geelong** (~40 min). Use Figure 2. Model how to read a place through the three shapers. Give the 2021 numbers. Then students apply the three shapers to their own place ("Your turn").
- How places change, with real data** (~40 min). Figures 3 and 4 (City of Moonee Valley). Practise reading change: grew/got smaller, by how much. Connect to migration. Note that change can also mean getting smaller.
- How change is managed: zones** (~40 min). Planning scheme, zone, zoning; Figure 5 and the real Victorian zone names. Ask: why are factories in a different zone from homes?
- How change is managed: decisions** (~40 min). Figure 6. Planning permit, conditions, community say, VCAT review. Role-play: one student proposes a change, the class walks it through the six steps.
- Worked example 2: level crossings** (~40 min). Figures 7 and 8. Read the numbers. Discuss both sets of views; insist that each student gives one real point for each side. Link back to Figure 6: who decides, who has a say.
- Local investigation, Steps 1–4** (~2 lessons). Choose the local issue. If possible, do Step 2 as a short walk outside the classroom — this is the section's fieldwork site, and it seeds the fieldwork skills that Section 3B teaches formally.
- Class response and evidence task** (~1 lesson). Step 5, then the evidence task below. Note the link forward to Section 4B.

Note: this section is a knowledge section. It does not teach the fieldwork skills content description itself; Section 3B owns that. This section provides the local planning issue as its natural site.

Practice tasks

With support

Q1. Look at Figure 1. Name the three groups of shapers that give a place its characteristics.

Q2. Sort each of these into one of the three groups from Figure 1: (a) a river running through the place; (b) the place is about 75 km from Melbourne; (c) people moving into the place from other places.

Q3. Look at Figure 2. Give two ways to describe the relative location of Greater Geelong.

Q4. Look at Figure 2. Name two water parts and one land part of Greater Geelong's environment.

Q5. Look at Figure 3. How many more people lived in the City of Moonee Valley in 2021 than in 2016? Show how you worked it out.

Q6. Look at Figure 4. (a) Name two birthplace groups that got bigger between 2016 and 2021. (b) Which birthplace group got smaller the most?

Q7. Look at Figure 5. (a) Which zone is mainly for homes? (b) Why do factories sit in their own zone, away from homes?

Q8. Look at Figure 6. (a) At which step can the people who live nearby have a say? (b) What are the two things the council can decide at step 5?

On your own

Q9. Choose a place you know well. Explain how one natural part of its environment shapes the lives of the people there.

Q10. Compare your place with Greater Geelong. Give one way they are similar and one way they are different, with a reason for each.

Q11. Look at Figures 3 and 4. Describe two ways the City of Moonee Valley changed between 2016 and 2021. Then give one reason why the place might have changed.

Q12. Think about the local area around your school. Name one place for homes, one place for shops, and one place for play or sport. Which zone from Figure 5 is each one likely to be in, and why do you think so?

Evidence task — your class response to a local planning issue

Present your class's response to the local planning issue you investigated. You may write a short speech, write a letter to the council, or make a poster. Your response must include:

- what the issue is, and where it is;
- at least two pieces of evidence — things you saw on your walk or on the map, or numbers from a figure;
- one view your class listened to but does not share, and how you answered it in a fair way;
- your class's response to the issue, with at least two reasons.

What success looks like

- The issue and its location are clear.
- Evidence is real and comes from the investigation.
- Both sides of the issue are treated with respect.
- The class response has at least two clear reasons.

Success is measured by the strength of the evidence and the reasons — not by which side the class picks.

Answers and teacher notes

- A1.** The environment; where the place is (its relative location); its connections with other places (interconnections).
- A2.** (a) The environment; (b) where the place is (relative location); (c) connections with other places (interconnections).
- A3.** Any two of: about 75 km from Melbourne; Melbourne is to the north east of Geelong; Geelong sits on Corio Bay, between Melbourne and the sea; the Princes Freeway and the railway line connect it to Melbourne.
- A4.** Water parts: Corio Bay, the Barwon River, the sea (Bass Strait). Land part: the You Yangs ranges. Any correct choice is fine.
- A5.** $121,851 - 116,671 = 5,180$ more people.
- A6.** (a) Any two of: Australia, Vietnam, England. (b) Italy (down by 374 people).
- A7.** (a) The yellow zone, the General Residential Zone. (b) Factories can be noisy, so they sit away from homes in their own zone.
- A8.** (a) Step 4, “The community has a say.” (b) Approve the plan (sometimes with conditions) or refuse it.
- A9.** Mark on: one named natural part, and a clear explanation of how it shapes life. Example: “Our creek gives us a park and a walking path, so people exercise and meet there.”
- A10.** Mark on: one clear similarity, one clear difference, and a reason for each. Example similarity: both have a river. Difference: Geelong is on a bay; my place is not near the sea.
- A11.** Two changes, e.g.: the number of people went up by 5,180; the number of homes went up by 4,938; more people born in Australia, Vietnam and England; fewer born in Italy and China. One sensible reason, e.g.: new homes were built, so more people could move in; people moved from other countries to live there.
- A12.** Mark on: one correct example of each place type, and a sensible zone for each with a short reason. Example: homes — General Residential Zone, because that zone is mainly for homes.
- Evidence task.** Mark against the four points in “What success looks like.” Note: mark on the quality of the evidence and reasoning, never on which side of the issue the class chooses.
-

Sources and curriculum codes

Sources

- Australian Bureau of Statistics, *Census of Population and Housing*, 2016 and 2021. QuickStats for the City of Moonee Valley and the City of Greater Geelong. Retrieved 25 August 2026.
- Victorian Government, Level Crossing Removal Project (levelcrossings.vic.gov.au). Figures for crossings and stations as of July 2026. Retrieved 25 August 2026 (cross-checked against the article “Level Crossing Removal Project,” Wikipedia, retrieved 25 August 2026).
- Reviews of council planning decisions: VCAT, the Victorian Civil and Administrative Tribunal (see the article “Victorian Civil and Administrative Tribunal,” Wikipedia, retrieved 25 August 2026).
- Zone names — General Residential Zone, Commercial 1 Zone, Industrial 1 Zone — follow the Victoria Planning Provisions, the Victorian Government’s planning rules.
- The sketch map of Greater Geelong and the model town map were drawn for this book. They are not to scale.

Curriculum codes for this section

- Content description: VC2HG6K03
- Elaborations drawn on: VC2HG6K03.E01, VC2HG6K03.E02, VC2HG6K03.E03
- Achievement standard: Levels 5–6 Geography, shared with Sections 1A and 1D

Sustainability of places and environments: threats to places, and positive human action

Teaching sequence

For the teacher. This block is for planning. Student material begins at *Theory*.

Curriculum trace

- Content description owned by this section: **VC2HG6K04** (Geographical Knowledge and Understanding, Management of places). The full CD runs on into a clause about Aboriginal and Torres Strait Islander custodial responsibility; that clause is cut at authoring time per TOC §2A and CONTENT_POLICY Rule 1. This section teaches the neutral sustainability remainder only.
- Achievement standard: shared with 1A and 1C (TOC §2 maps the sentence to its owner sections); this section builds the sustainable-management side through the threat debates and positive-action cases.
- Elaborations drawn (ids verbatim from TOC §3):
 - **VC2HG6K04.E01** (Figure 9; Aral Sea, Venice, Great Plains).
 - **VC2HG6K04.E02** (Figures 3, 10 and 11; Worked example 1).
 - **VC2HG6K04.E03** (Figures 4, 5 and 12; Worked example 2).
 - **VC2HG6K04.E08** (Figures 5, 6 and 7).
- **Not taught here (TOC §2A):** elaborations .E04–.E07 and the CD’s custodial-responsibility clause. No task, text or figure in this section references them or assumes knowledge of them. Per CONTENT_POLICY Rule 1, Aboriginal and Torres Strait Islander content is excluded; per TOC §4, no prior learning involving it is assumed.
- Prior learning assumed (both neutral): VC2HG4K03 (environments and why they matter) and VC2HG4K09 (how resources are used and whether that use is sustainable).
- Cross-links within this book: the threat → positive-action lens built here is reused when students study their own local place in section 1C and when they return to debate later in the book. Cross-subject link: VC2HE6K01 Economics (scarcity and choices about resources).
- Where this section keeps its teeth after §2A: the debates in Questions 9–10. Per **CONTESTED_TERMS.md**, both sides of each motion are steelmanned and marks are given for the quality of reasoning, never for the side taken.
- Volume check against TOC §3: one teaching sequence (below); two worked demonstrations with real cited data; eight with-support tasks (Q1–Q8); four on-your-own tasks (Q9–Q12); one evidence-based writing task.

Key vocabulary (define at first use in class): sustainability, environment, place, change, threat, outmigration, pollution, reforestation, Landcare, rehabilitation (once, as the curriculum term, then “repair”), census, hectare, interconnection, scale, water storage, drought, heatwave, asthma, thunderstorm asthma. All student-facing vocabulary is held at or below Year 5 level by the word-ladder gate; the terms above are exempt as defined subject terms or proper names.

Suggested sequence (about 5 lessons)

1. What sustainability means; the three parts of a sustainable place (Figure 1). Define the key words.
 2. Sorting threats: natural vs human (Figure 2). Natural threats in depth — Worked example 1 on thunderstorm asthma (Figures 10–11); drought and water storages (Figure 3); heatwaves; floods.
 3. Human threats in depth — Broken Hill and outmigration (Figure 12; Worked example 2); very fast growth in Melbourne (Figure 4); pollution and the Hazelwood mine fire (Figure 5, first half); new roads.
 4. Positive human action — Landcare (Figure 7); reforestation and China’s Great Green Wall (Figure 6); repairing places after industry (Figure 5, second half); places in other countries (Figures 8–9).
 5. Debates (Questions 9–10) and the evidence task.
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Theory

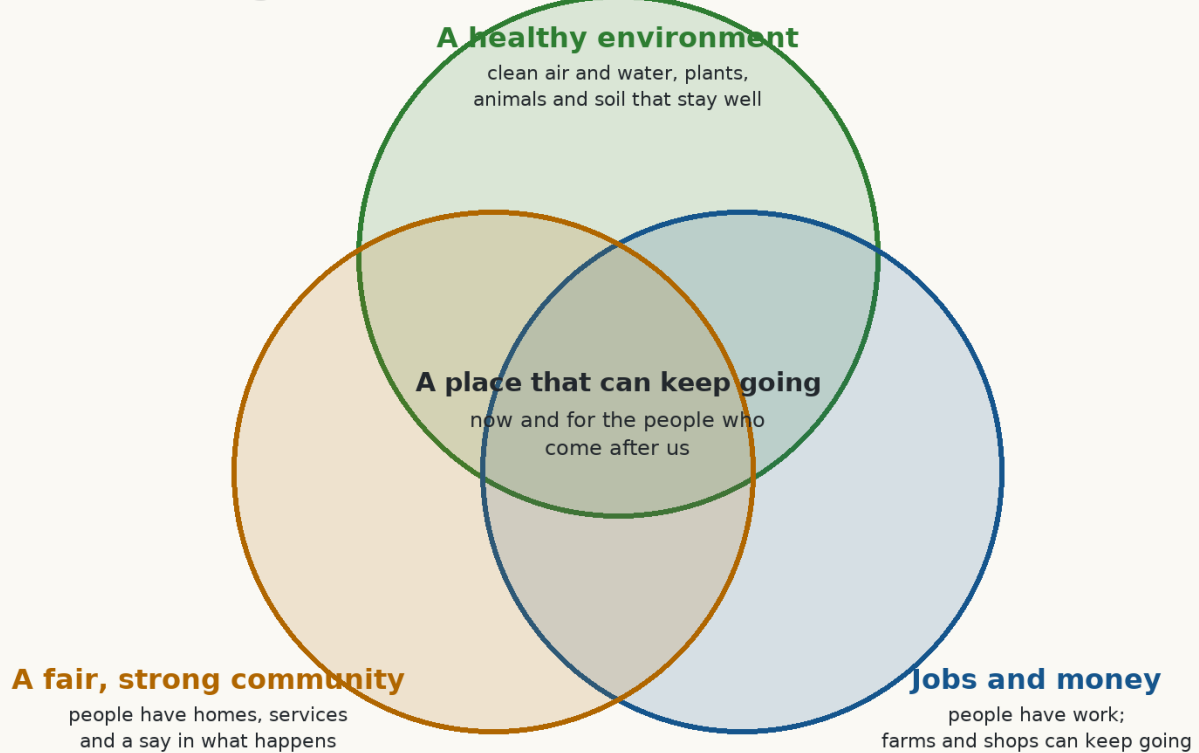
Places can do well — or they can struggle. A **place** is a part of the world that people give meaning to: a town, a suburb, a valley, a city. Every place has **characteristics** — the things that make it what it is. These include its people, its jobs, its buildings, its services (such as schools, hospitals, shops and buses) and its **environment** — the living and non-living things around us, such as the air, the water, the soil, the plants and the animals.

Places **change**. That means they become different over time. Some change helps a place. Some change hurts it. Geography asks a big question about every place: *can this place keep going well?* That question is about **sustainability**.

What does sustainability mean here? People use the word *sustainability* in different ways. This book uses the meaning given by the World Commission on Environment and Development in its 1987 report *Our Common Future*: meeting the needs of people today without making it harder for the people who come after us to meet their own needs. Other meanings exist. In this section, that is the one we use.

In plain words: a sustainable place looks after its people and its environment now, so the people who live there in fifty years can do well too.

Figure 1 What makes a place sustainable?



A model made for this book. The three parts overlap: each one needs the other two.

A diagram of three overlapping rings labelled a healthy environment, jobs and money, and a fair strong community, with the words a place that can keep going in the middle

Figure 1 The three parts of a sustainable place. Each part needs the other two.

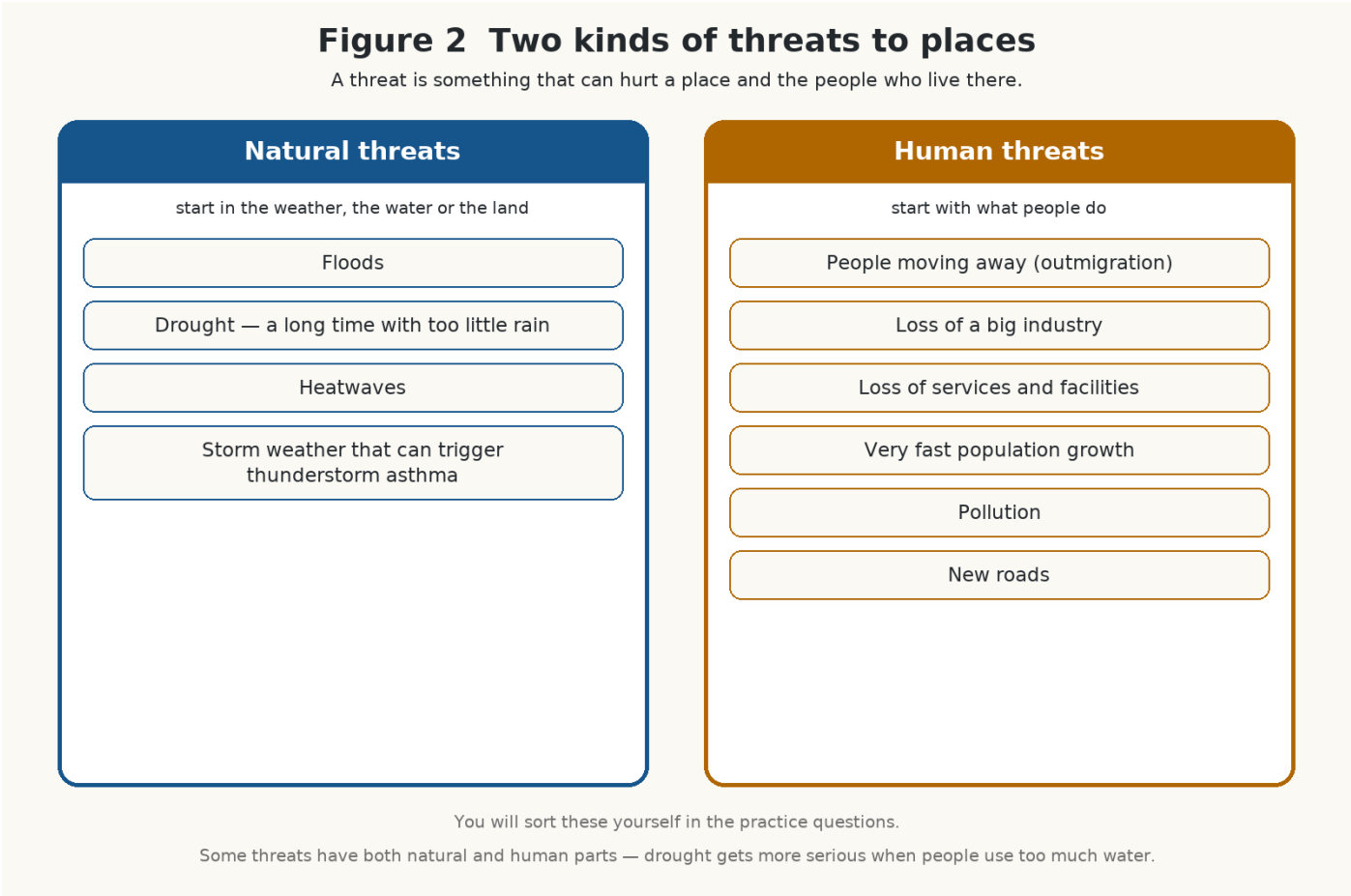
Three parts that need each other. Figure 1 shows three things a place needs:

- a **healthy environment** — clean air and water, good soil, plants and animals;
- **jobs and money** — work for people, and money to keep things going;
- a **fair, strong community** — homes, services, and people who help each other.

Each part needs the other two. A mining town with good jobs but dirty air and water is not a healthy place to live in. A beautiful town with no jobs loses its people. A rich town where people are not treated in a fair way will not hold together. Sustainability means all three parts working at once.

The **economic sustainability** of a place means its work and money keep going: its farms, mines, shops and factories keep working. The **social sustainability** of a place means it keeps the things people need to live well: homes, services and a community that holds together.

Threats to places. A **threat** is something that can hurt a place and the people who live there. Threats can be **natural** — they start in the weather, the water or the land. Or they can be **human** — they start with what people do. Figure 2 sorts the threats you will study in this section.



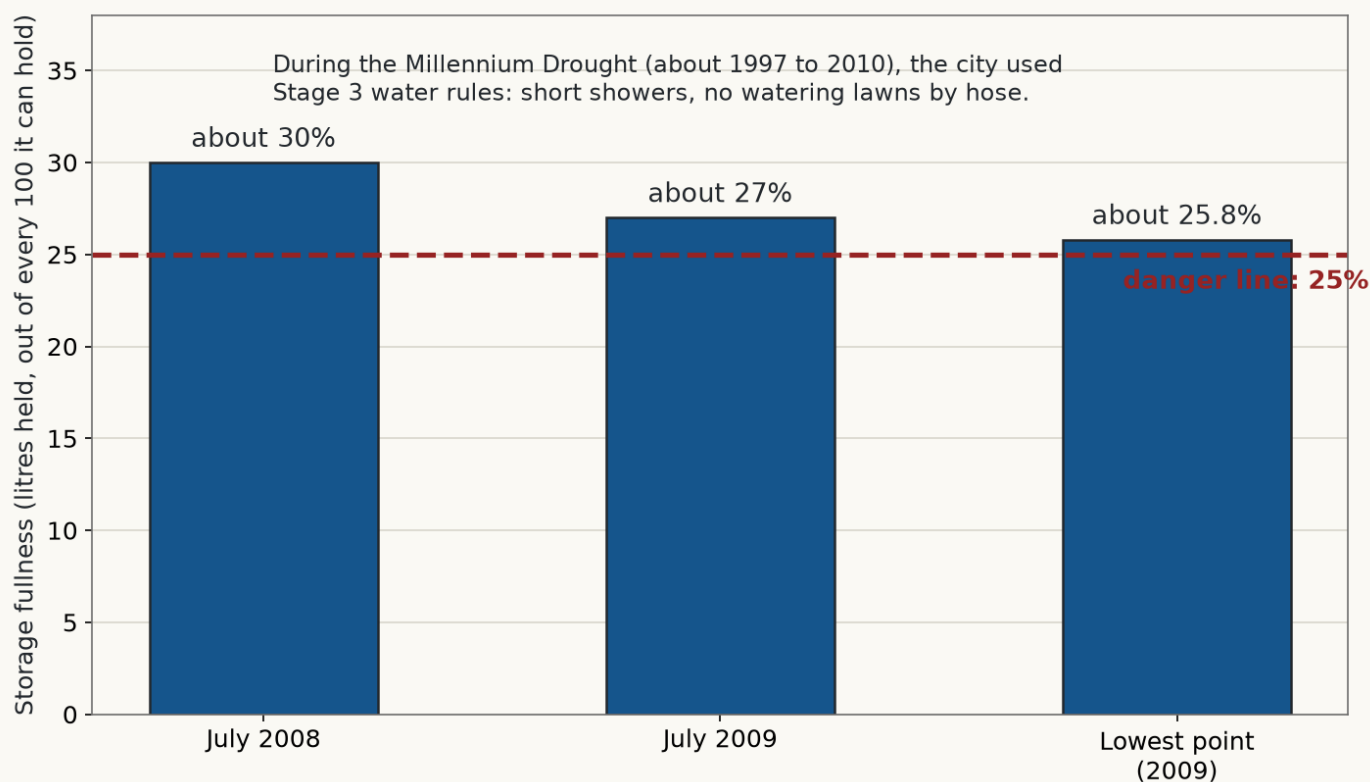
A sort diagram in two panels, listing natural threats and human threats to places

Figure 2 Two kinds of threats to places. You will sort these yourself in Question 2.

Natural threats. Four natural threats matter a lot in Australia: floods, drought, heatwaves, and storm weather that can trigger thunderstorm asthma.

- Floods** happen when rivers rise over their banks after heavy rain. In January 2011, heavy rain made rivers across Victoria rise. More than 1,730 properties were flooded. In the town of Charlton, more than 400 houses were flooded. In Horsham, about 600 were flooded. The damage was put at about \$2,000 million. (Source: Wikipedia, ‘January 2011 Victorian floods’, retrieved 25 August 2026.)
- Drought** is a long time with too little rain. From about 1997 to 2010, south-east Australia lived through the **Millennium Drought** — a very long drought. A **water storage** is a place where water is held for people to use, like a big lake made by a dam. Figure 3 shows how far Melbourne’s water storages went down during that drought.
- Heatwaves** are a stretch of several days that is much hotter than normal. From late January to early February 2009, a heatwave hit south-east Australia. Melbourne had three days in a row above 43 °C — a record. On 7 February 2009 it reached 46.4 °C. Health authorities linked 374 deaths to that heatwave. (Source: Wikipedia, ‘Extreme weather events in Melbourne’, retrieved 25 August 2026.)
- Thunderstorm asthma** is a sudden wave of asthma attacks set off by storm weather in pollen season. **Asthma** is a health condition that makes it hard to breathe. **Hay fever** is a reaction to pollen that makes people sneeze and brings itchy eyes. Worked example 1 below tells the full story of one night in Melbourne.

How full were Melbourne's water storages?



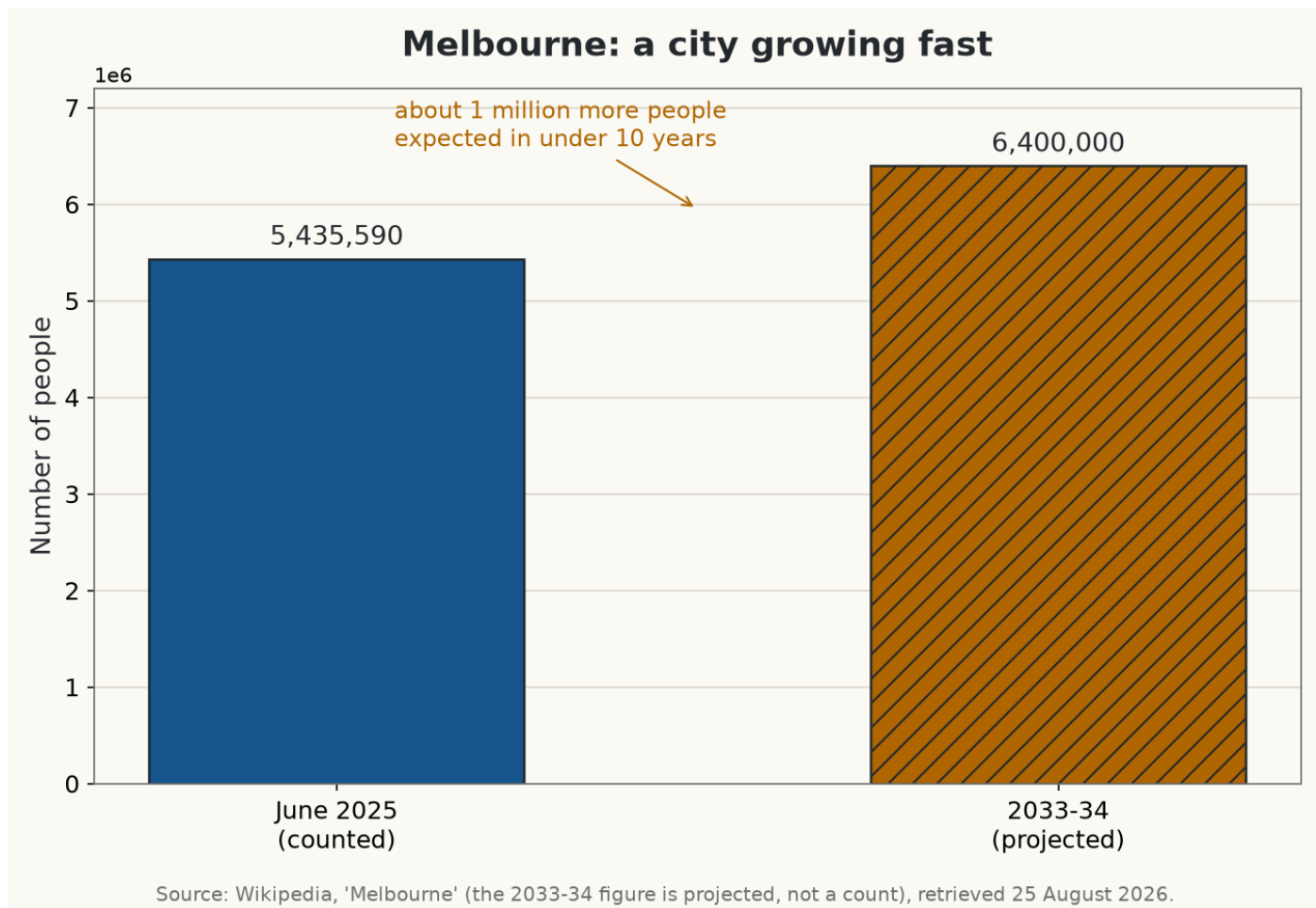
Source: Wikipedia, '2000s Australian drought', retrieved 25 August 2026.

A bar chart showing how far Melbourne's water storages went down during the Millennium Drought, to about 26%, just above the 25% danger line

Figure 3 How far Melbourne's water storages went down in the Millennium Drought — and the danger line they came close to.

Human threats. People can also threaten places — often without meaning to.

- **Loss of an industry, and outmigration.** Some towns are built around one big industry, such as mining. If that industry shrinks, the jobs go with it. Then people — often young adults first — move away to find work. **Outmigration** means more people leaving a place than moving into it. When people leave, the town's services and facilities — shops, buses, even schools — shrink too. That makes the town harder to live in, and more people leave. Broken Hill in far-west New South Wales shows this pattern. Worked example 2 below tells its story with census numbers. A **census** is a count of every person in the country, done every five years.
- **Very fast population growth.** Growth can be good: it brings new people, new workers and new jobs. But very fast growth puts pressure on a place. More people need more houses, more water, more roads, more schools and more hospitals. Melbourne is growing this way. Figure 4 shows how fast.
- **Pollution.** **Pollution** means putting harmful things into the air, the water or the land. In February and March 2014, a fire burned in the open coal mine at the Hazelwood power station in Victoria's Latrobe Valley for over a month. Smoke blew over the nearby town of Morwell. A 2016 government report linked the smoke to 11 deaths. Figure 5 tells the rest of Hazelwood's story. (Source: Wikipedia, 'Hazelwood Power Station', retrieved 25 August 2026.)
- **New roads.** Roads help people get around. But a new road can cut through a quiet street or a patch of bush. It can bring noise, danger and heavy traffic to a place that was once quiet.



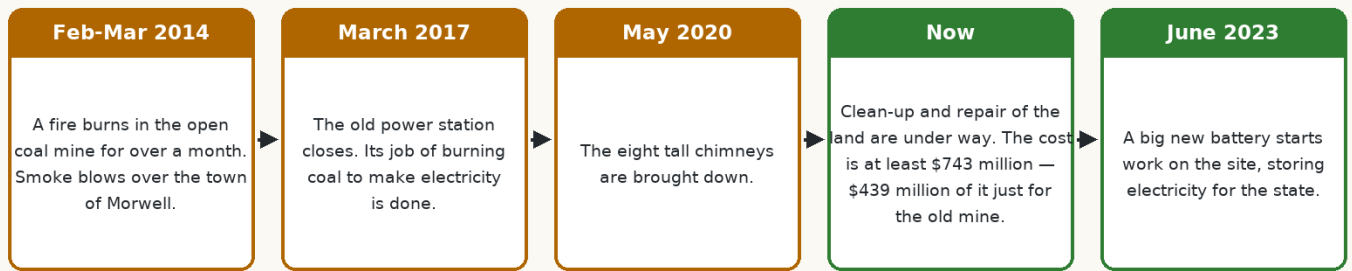
Two bars comparing Melbourne's counted population of 5,435,590 in June 2025 with a projected population of 6,400,000 in 2033-34

Figure 4 Melbourne now and as it is projected to be: about one million more people in under ten years.

Positive human action. People do not only hurt places. They also help them — sometimes in a big way. Three kinds of positive action matter in this section.

- **Reforestation** means planting trees where forest has been lost. Since 1978, China has planted trees across its north to hold back the growing Gobi Desert. The work is called the Great Green Wall. Figure 6 shows how much China's forest cover has grown. A **hectare** is a square 100 m by 100 m — about the size of a football ground.
- **Landcare groups** are groups of local people who volunteer to repair the land, the water and the wildlife where they live. The idea began in Victoria in 1986. Figure 7 shows how it grew.
- **Repairing places after mining, industry or waste.** Land hurt by a mine, a factory or a rubbish tip can be made healthy and safe to use again. The formal name for this work is **rehabilitation**. This section uses the simpler word *repair*. Figure 5 shows the repair now under way at Hazelwood. It is slow and costly — at least \$743 million — but a big new battery already stores electricity on the old site.

Figure 5 Repairing a place after industry: Hazelwood, in Victoria's Latrobe Valley



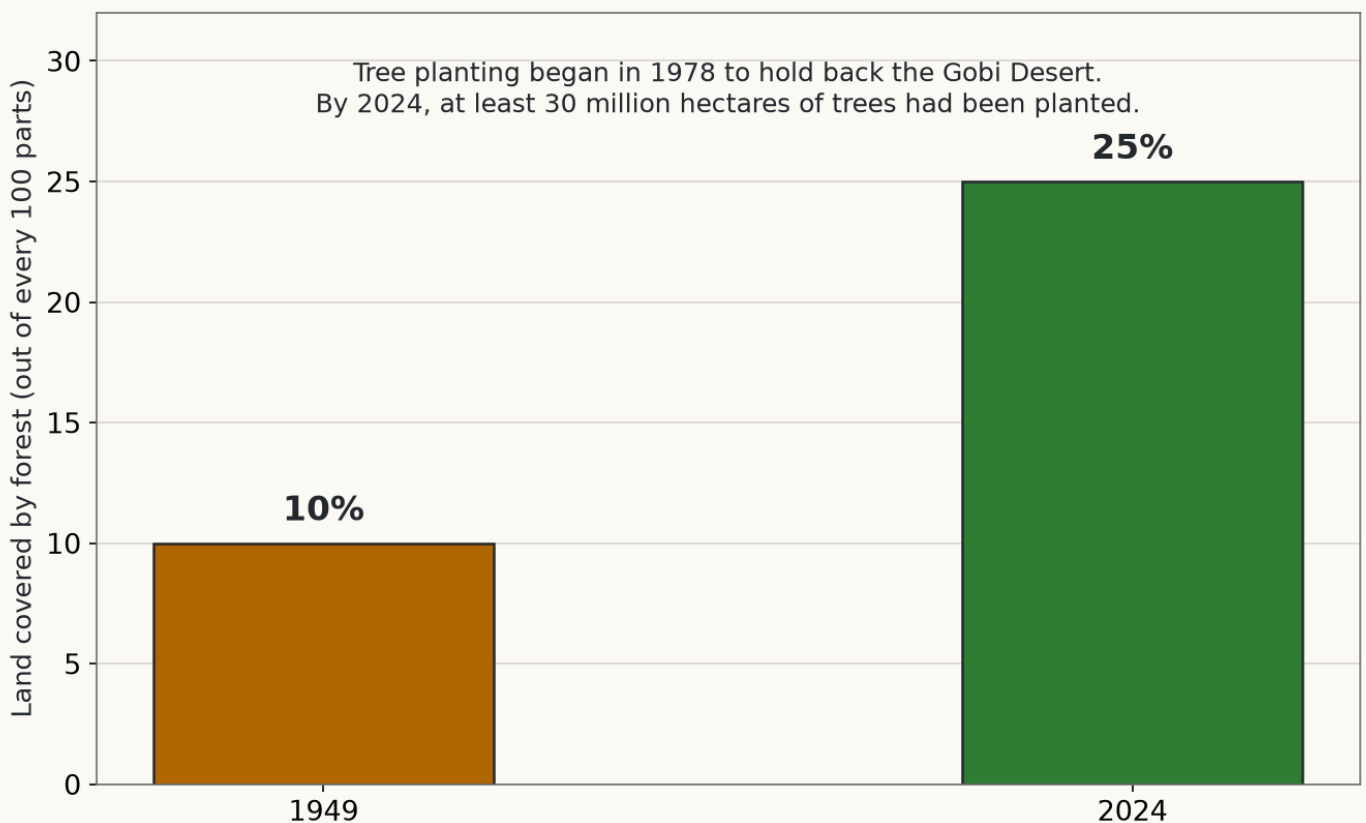
Hazelwood shows a long road back: a place hurt by industry takes years of work and money to repair.

Source: Wikipedia, 'Hazelwood Power Station', retrieved 25 August 2026.

A timeline of the Hazelwood power station site in Victoria, from a mine fire and smoke in 2014 to clean-up work and a new battery today

Figure 5 From hurt to repair: the Hazelwood site in Victoria's Latrobe Valley.

China's forest cover: from 10% to 25% of the land



Source: Wikipedia, 'Great Green Wall (China)', retrieved 25 August 2026.

A column chart showing China's forest cover growing from 10% of the land in 1949 to 25% in 2024

Figure 6 China's Great Green Wall: forest cover grew from 10% of the land in 1949 to 25% in 2024.

Figure 7 Landcare: how one small group grew into a national movement

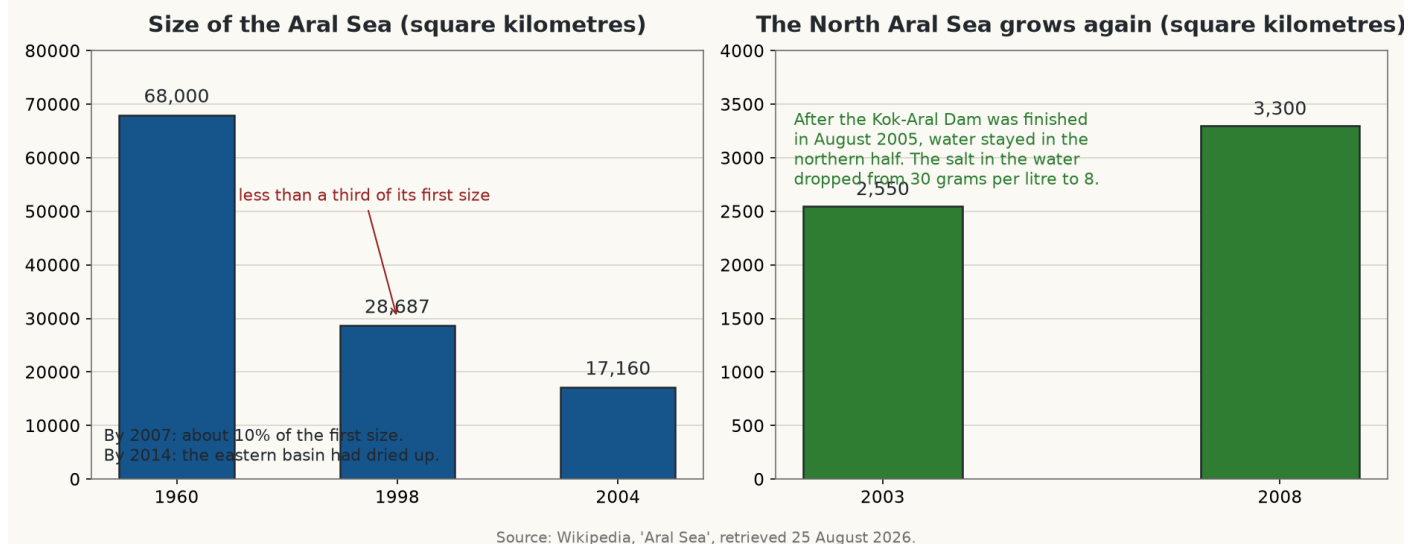


A timeline showing Landcare growing from one group of farmers in 1986 to about 4,000 groups across Australia today

Figure 7 Landcare: from one group of farmers in central Victoria to about 4,000 groups across Australia.

Places in other countries. The same ideas travel. Figure 8 and Figure 9 look at three cases: the Aral Sea in central Asia, Venice in Italy, and the Great Plains of the United States. In each place, people changed things — for bad, and then, in some cases, for good.

The Aral Sea, central Asia: people took the water — then people gave some back



Two charts showing the Aral Sea shrinking from 68,000 to 17,160 square kilometres, and then the North Aral Sea growing again after a dam was built in 2005

Figure 8 The Aral Sea: people took the water — then people gave some back.

Figure 9 People changed places in other countries — in bad ways and good ways		
Region and place	What people did, and what happened	Key numbers
Asia The Aral Sea	People turned the rivers away from the sea to water cotton farms. The sea shrank; the fishing industry was lost. A dam built in 2005 is helping the northern half to fill again.	68,000 km2 in 1960 17,160 km2 by 2004 about 40,000 fishing jobs at the sea's best time
Europe Venice, Italy	The city floods when high tides and storms push sea water in. Gates under the sea, called MOSE, were built to keep the floods out.	flood of 1.87 m on 12 November 2019 gates hold back tides up to 3 m; first used 3 October 2020
North America Great Plains, USA	In the 1930s, drought and poor farming turned farm land into dust. Huge dust storms blew the soil away. People later planted windbreak trees and learned to farm without lifting the soil.	Black Sunday dust storm: 14 April 1935 about 3.5 million people left the Plains states by 1938, blowing soil was down 65%
People can hurt places — and people can help them. These real cases come from Asia, Europe and North America. Sources: Wikipedia, 'Aral Sea'; 'MOSE Project'; 'Dust Bowl' — all retrieved 25 August 2026.		

A table of three real cases where people changed places in Asia, Europe and North America

Figure 9 People changed places in Asia, Europe and North America — in bad ways and good ways.

How places connect. Places are **interconnected**. That means what happens in one place can touch another. Melbourne’s growth changes how much water the whole region needs. Smoke from a mine fire in the Latrobe Valley hurt people in the town of Morwell. Rivers turned away from the Aral Sea changed life for everyone who fished there. Geographers also think about **scale** — the size we look at. Morwell is local. Victoria’s water storages are state-wide. Broken Hill and Landcare are national. The Aral Sea, Venice and the Great Plains are world scale. The same question runs through all of them: *can this place keep going well?*

Worked examples

Example 1 — Reading a natural threat: thunderstorm asthma, Melbourne, 21 November 2016 (worked step by step)

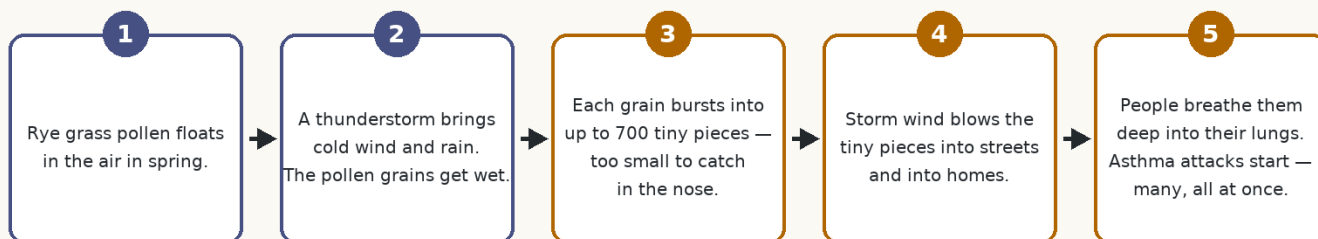
Task. Read the thunderstorm asthma case using three questions: (1) What was the threat? (2) How did it hurt the place? (3) What can people do so it hurts less next time?

Step	What we find	Why it counts
1. Name the threat	On the night of 21 November 2016, a storm moved over Melbourne in the rye grass pollen season. The wet weather made the pollen grains	This is a <i>natural</i> threat: it started in the weather. It is also seasonal — it only happens when grass pollen and the right storm line up.

Step	What we find	Why it counts
	burst, sending out hundreds of tiny pieces. Cold wind carried the pieces deep into people's lungs and set off asthma attacks. Figure 10 shows the five steps.	
2. Find the harm	9 people died. Hospital emergency rooms saw about ten times as many asthma cases as on a normal day. Thousands of people needed urgent help on the one night, across Melbourne (Figure 11). Ambulance services and some hospitals could not keep up.	Not everyone was hurt the same way. People with asthma or hay fever were most at risk. One storm can hurt a whole city in one night.
3. Find the action	Health experts give this advice: people with a grass pollen allergy should get checked for asthma, and people who know they have asthma should follow their prevention medicine plan. (Source: Wikipedia, 'Thunderstorm asthma', retrieved 25 August 2026.)	These steps do not stop the storm. They make the harm smaller when the storm comes. That is what preparedness means for a natural threat.

Sources for the case facts: Wikipedia, 'Thunderstorm asthma'; 'List of disasters in Australia by death toll'; 'Extreme weather events in Melbourne' — all retrieved 25 August 2026.

Figure 10 How thunderstorm asthma happens

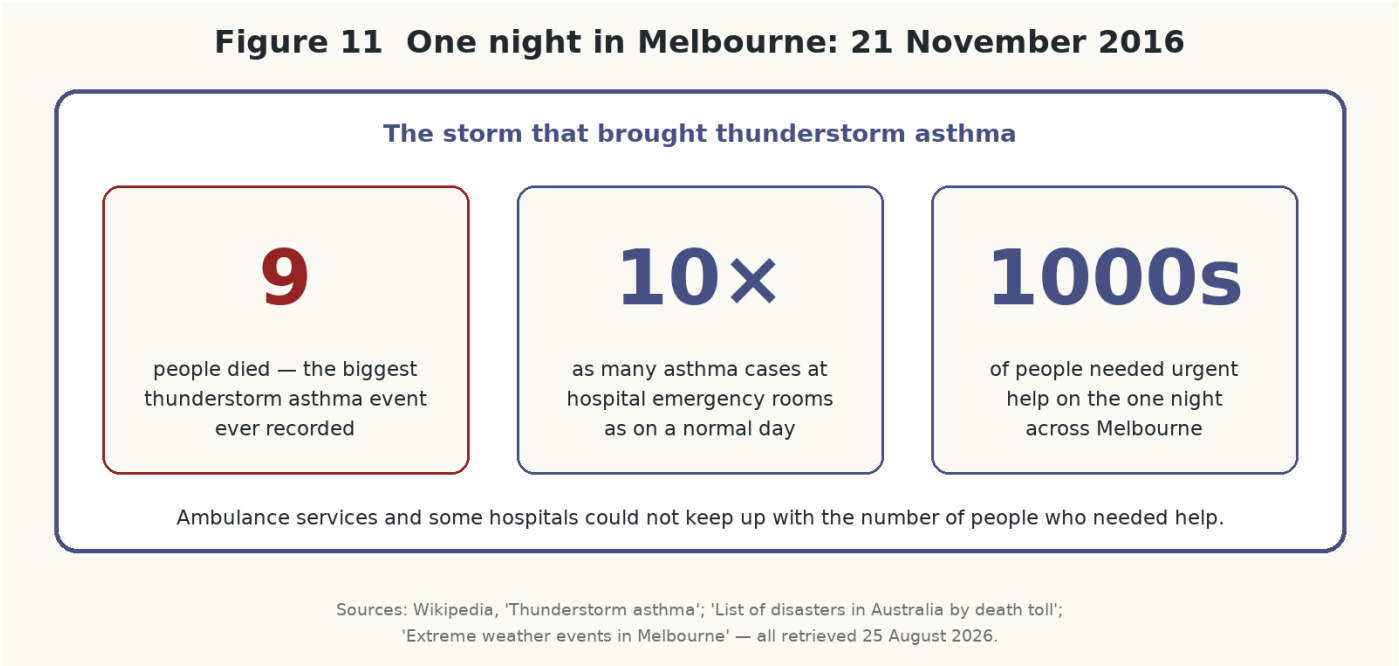


People with asthma or hay fever were hit the hardest on 21 November 2016.

Source: Wikipedia, 'Thunderstorm asthma', retrieved 25 August 2026. Diagram made for this book.

A five-step diagram showing how a thunderstorm can trigger asthma, from rye grass pollen to people having trouble breathing

Figure 10 How a thunderstorm can trigger asthma.



A fact panel showing that nine people died and ten times as many asthma cases reached hospitals on the night of 21 November 2016 in Melbourne

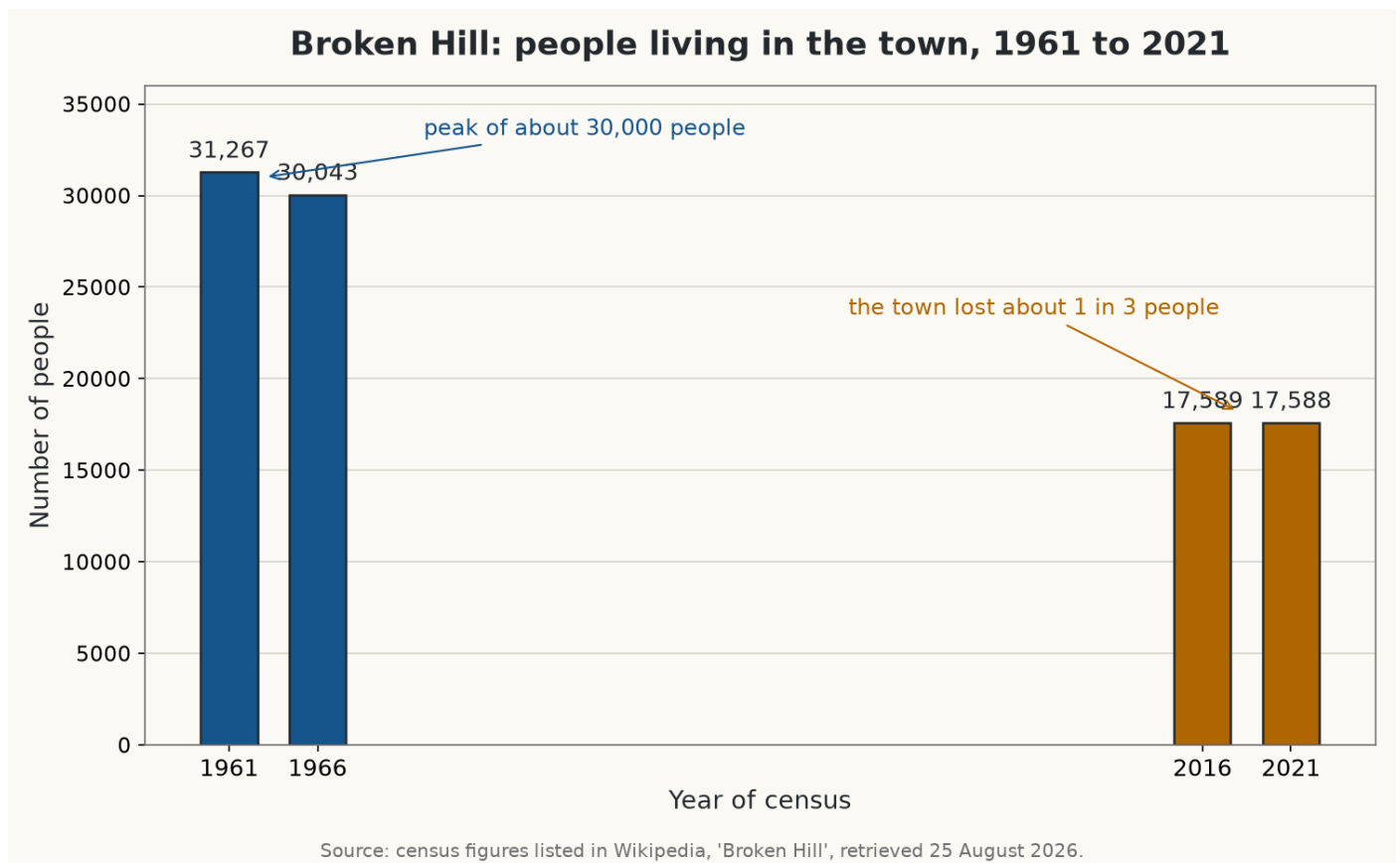
Figure 11 One night in Melbourne: the numbers from 21 November 2016.

Example 2 — Reading human threats, then looking for positive action: Broken Hill (worked step by step)

Task. Read Figure 12 about Broken Hill. (1) Which human threats can you see? (2) How do the threats link to each other? (3) What positive action could help a town like this keep going?

Step	What we find	Why it counts
1. Read the data	Broken Hill is a mining town in far-west New South Wales, built on silver and lead mining. In the early 1960s about 30,000 people lived there. By 2021 the census counted 17,588 (Figure 12). The town has lost about one person in three.	Census numbers show change over sixty years. This is slow, long-term change — not one bad year.
2. Link the threats	As mining work shrank, people moved away to find jobs — outmigration. With fewer people, the town’s shops, services and facilities shrank too. Loss of industry, outmigration and loss of services feed into each other, like a circle going downhill.	One human threat can start the next. Geographers look for these links, not just single events. This is the human-threat pattern made real in one Australian town.
3. Look for positive action	Ideas (not facts from this section): towns like Broken Hill can work to keep going the way Landcare groups do — local people joining to repair land and water (Figure 7) — and by building new kinds of work to replace the old industry, the way Hazelwood’s old site is gaining a new battery (Figure 5).	Positive action answers the same three parts as Figure 1: a healthy environment, jobs and money, and a fair, strong community. A town that works on all three gives its people a reason to stay.

Sources: Figure 12 data from census figures listed in Wikipedia, 'Broken Hill', retrieved 25 August 2026.



A column chart of the number of people living in Broken Hill from 1961 to 2021, falling from about 31,000 to about 17,500

Figure 12 Broken Hill's people, 1961 to 2021: a town that lost about one person in three.

Practice questions

With support

Q1. Look at Figure 1. Name the three parts a place needs to be sustainable. For one of the parts, give an example of how it needs the other two.

Q2. Sort the threats below into *natural* and *human*. Use Figure 2 to check your sort. floods; a new road through a quiet street; drought; loss of a town's big mine; heatwaves; pollution from a factory; storm weather that triggers thunderstorm asthma; very fast population growth; outmigration; loss of services and facilities.

Q3. Look at Figure 10. List the five steps that take a case from rye grass pollen to people having trouble breathing. Which step happens inside the human body?

Q4. Look at Figure 11. How many times more asthma cases reached hospital emergency rooms than on a normal day? Which two services could not keep up with the number of people who needed help?

Q5. Look at Figure 12. How many people lived in Broken Hill in 1961? About what share of its people has the town lost since its peak? Which human threat from Figure 2 does this show?

Q6. Look at Figure 4. What was Melbourne's counted population in June 2025? What is it projected to reach by 2033–34? Name two things very fast growth like this can put pressure on.

Q7. Look at Figure 3. About how full were Melbourne's water storages at their lowest point? What is the danger line shown on the chart? Name one of the Stage 3 water rules listed.

Q8. Look at Figure 7. Where and when did the first Landcare group begin? About how many Landcare groups work in Australia today, and about how many other countries has the idea reached?

On your own

Q9. Debate — build the strongest case on both sides. Motion: “*Natural threats hurt places more than human threats do.*” Write the strongest case **for** the motion (at least two reasons with evidence from this section) and the strongest case **against** it (at least two reasons with evidence). Then state which side you give more weight to, and why. Marks are given for the quality of your reasoning, not for which side you pick.

Q10. Debate — build the strongest case on both sides. Motion: “*Very fast population growth is good for a place.*” Write the strongest case **for** and the strongest case **against**, each with at least two reasons. Use Figure 4 and what you know about services and the environment. Then state which side you give more weight to, and why.

Q11. The Aral Sea shrank — then its northern half started to grow again (Figure 8). What did people do that hurt the sea, and what did people do that is helping it? Use at least three numbers from Figure 8 in your answer.

Q12. Choose one threat from Figure 2 and one positive action from this section (reforestation, Landcare, or repairing places after mining, industry or waste). Explain how that action could answer that threat. Use at least one real place named in this section as your example.

Evidence task

Write one paragraph (6–8 sentences) answering this question:

How can a place that has been hurt get better?

Choose one place you read about in this section — for example Morwell, Broken Hill, the Aral Sea, Venice or the Great Plains. In your paragraph:

1. Name the place and the threat that hurt it.
2. Give at least **two facts** from this section, and say which figure each one came from.
3. Explain one thing people did — or could do — to help the place keep going.
4. Finish by linking your answer to the three parts in Figure 1: which parts does the action help?

Checklist before you hand in:

- ☐ place named and threat named
- ☐ two facts, each with its figure number
- ☐ action explained, not just listed
- ☐ link to Figure 1’s three parts
- ☐ 6–8 sentences, full stops and capital letters

Marks are given for how well your facts and your reasoning fit together — not for which place you choose.

Answers

A1. The three parts are: a healthy environment; jobs and money; a fair, strong community. Example: jobs and money need a healthy environment — a town with dirty water or poor soil cannot keep farms or tourism going, and sick workers cannot work well. Jobs also need a fair, strong community — people stay where there are homes, schools and services.

A2. Natural: floods; drought; heatwaves; storm weather that triggers thunderstorm asthma. Human: a new road through a quiet street; loss of a town's big mine; pollution from a factory; very fast population growth; outmigration; loss of services and facilities.

A3. The five steps: rye grass grows and makes pollen; pollen grains take in water and burst into tiny pieces; storm winds carry the pieces into the air and into people's lungs; people with asthma or hay fever find their airways closing up; people have trouble breathing and need urgent help. The steps that happen inside the human body are the pieces reaching the lungs and the airways closing up.

A4. About ten times as many asthma cases as on a normal day. Ambulance services and some hospitals could not keep up.

A5. 31,267 people in 1961. The town peaked at about 30,000 and had 17,588 by 2021 — it has lost about one person in three. This shows outmigration (and, behind it, loss of an industry).

A6. 5,435,590 in June 2025; projected to reach 6,400,000 by 2033–34. Pressure can fall on houses, water, roads, schools and hospitals (any two).

A7. About 25.8% full at the lowest point. The danger line is 25%. One Stage 3 rule: short showers, or no watering lawns by hose.

A8. The first group began in 1986 with farmers near St Arnaud in central Victoria. About 4,000 groups work in Australia today, and the idea has spread to about 15 other countries.

A9. Marked on reasoning; see Model responses for one strong way to answer. A full answer needs at least two strong reasons on each side, evidence from this section, and a stated, reasoned choice.

A10. Marked on reasoning; see Model responses. A full answer needs at least two strong reasons each side, use of Figure 4, and a stated, reasoned choice.

A11. People turned the rivers that brought water to the Aral Sea away, to water cotton farms. The sea shrank from 68,000 km² in 1960 to 28,687 km² by 1998 and 17,160 km² by 2004; by 2007 it was about 10% of its first size. Then people built the Kok-Aral Dam (finished August 2005) to keep water in the northern half. The North Aral Sea grew from 2,550 km² in 2003 to 3,300 km² by 2008, and the salt in its water dropped from 30 grams per litre to 8.

A12. Marked on fit between threat, action and place. See Model responses for one model. A full answer names a real threat from Figure 2, matches a real positive action to it, and uses a place from this section.

Model responses

Model for Q9 (debate: natural threats hurt places more than human threats do)

For the motion. Natural threats can hurt a place in one night, and no one can stop them — only prepare. On 21 November 2016, one storm in Melbourne set off thunderstorm asthma; 9 people died and emergency rooms saw ten times their normal number of asthma cases (Figures 10 and 11). The 2009 heatwave killed 374 people in about two weeks, and the January 2011 floods flooded more than 1,730 properties across Victoria. Human threats do not often hit this fast or this hard.

Against the motion. Human threats can quietly kill a place over decades, and then the place cannot get back up. Broken Hill has lost about one person in three since the early 1960s because its mining work shrank (Figure 12). The Aral Sea shrank to about 10% of its first size because people turned its rivers away (Figure 8). And unlike storms,

these harms were choices — which means they could have been chosen another way. A threat you can prevent but don't is, in that sense, a bigger threat.

Weighing up. Give more weight to the against side: natural threats are sharper, but human threats go deeper, last longer, and were avoidable. (Another student could give the weight to the other side; marks go to the reasons and the evidence.)

Model for Q10 (debate: very fast population growth is good for a place)

For the motion. More people means more workers and more customers, so new jobs and new services can open. Growth also brings new ideas and more hands to help. A growing city like Melbourne can support more schools, hospitals and buses than a shrinking town can (Figure 4).

Against the motion. Growth from 5,435,590 to a projected 6,400,000 by 2033–34 is about one million extra people in under ten years. Every one of them needs a house, water, roads, schools and doctors. If building cannot keep up, rents go up, traffic grows, and bush and farmland on the city's edge get built over. Growth is only good if the place can grow its services at the same speed.

Weighing up. Give more weight to the against side unless the growth is planned: the benefits are real, but they only arrive if housing, water and services keep up, and the figures show how fast that has to happen.

Model for the evidence task (place: Morwell, Victoria)

Morwell is a town in Victoria's Latrobe Valley that was hurt by pollution. In February and March 2014, a fire burned in the open coal mine at the nearby Hazelwood power station for over a month, and smoke blew over the town (Figure 5). A 2016 government report linked the smoke to 11 deaths, so the threat to people's health was real. Today the place is getting better through repair of the old site. The clean-up is expected to cost at least \$743 million, with \$439 million of that for the old mine alone (Figure 5). A new battery opened on the site in June 2023, storing electricity for the state. This action helps two of the three parts in Figure 1: it repairs the environment by making the land safe again, and it brings jobs and money back to the town. The community's part takes longer, because trust has to be rebuilt after people were hurt — but the repair work is a start.

Bushfires and other climate hazards: impacts, and prevention–preparedness–response–recovery

For teachers — where this section sits

- **Book / section:** ClassBasics Geography Yr5 (single-year book), Chapter 1, section 1E. Band: Geography Levels 5–6.
- **This section owns:** VC2HG6K05 (Geographical Knowledge and Understanding, Management of places), from the curriculum file VC2_AS-CD-Elab_29-07-2026.csv.
- **Achievement standard:** the hazards sentence mapped to this section in TOC §2 (extract file: VC2_ASExtract-CD-Elab_29-07-2026.csv).
- **Elaborations drawn on (illustrations of the content description, not the syllabus itself):**
 - VC2HG6K05.E01 (Figure 1 and Lesson 1: where hazards happen, and how often)
 - VC2HG6K05.E02 (Figures 2–8 and Lessons 2–3: what hazards cost)
 - VC2HG6K05.E03 (Figures 9–11 and Lessons 4–6: the four management stages)
- **Band notes (TOC):** this is the band’s nominated hazard study. Students map where, how often and how bad these hazards get, examine their economic, social and environmental costs, and apply the four management stages. Hazards sit inside the band’s climate knowledge and assume VC2HG4K06 is already taught. This section is a direct prerequisite for Levels 7–8 VC2HG8K05, so deep physical causes are deliberately **not** taught here — they belong at Levels 7–8.
- **Key question for this section (in this book’s words):** how can we reduce the harm bushfires do to people and places?
- **First Nations content:** none in this section, by design.
- **Data note (D6):** every figure, date and number in this section is a real Australian or Victorian record. Sources with retrieval dates are listed at the end of the section (all retrieved 25 August 2026).

What students will learn: what climate hazards are; where and how often bushfires, floods, droughts, cyclones and heatwaves happen in Australia; what they cost people, money and the environment; and how communities manage them through prevention, preparedness, response and recovery.

Teaching sequence (teacher-facing)

Six lessons, each tied to a figure and to the content description above. Figures are original teaching artwork drawn from the records listed in the Sources section; print or project each one.

Lesson	Focus	Main figure(s)	What students do
1	Hazards and places	Figure 1	Introduce the key question. Read the map together: which hazards happen where, and how often? Start the class hazard word wall (hazard, bushfire, flood, drought, cyclone, heatwave).
2	Bushfires: reading the records	Figures 2–5	Read the fire-history chart; meet the Fire Danger Ratings; sort Black Saturday’s costs into economic, social and environmental (Worked demonstration 2, part A).
3	Other climate hazards	Figures 6–8	Meet Cyclone Tracy, the Rochester flood and the

Lesson	Focus	Main figure(s)	What students do
			Millennium Drought. Practise reading pictographs and hundred-grids.
4	The four-stage cycle	Figure 9	Teach prevention, preparedness, response and recovery. Students sort example actions into the stages (Worked demonstration 2, part B).
5	The cycle in one real event	Figures 10–11	Follow the October 2022 Rochester–Echuca flood through all four stages. Families draft their own emergency-kit checklist.
6	Pulling it all together	All	Practice questions, then the extended evidence task (write, map or speak) answering the key question.

Support and challenge notes: the guided questions (Q1–Q8) all start from a figure, so students who need support can point before they write. The independent questions (Q9–Q12) and the extended task ask for claims backed by evidence, with no figure prompts.

Learn: what is a climate hazard?

A **hazard** is anything that can hurt people, damage the places people live, or damage the environment. (This section uses *hazard* in the sense used by the United Nations Office for Disaster Risk Reduction: a process or activity that can cause harm.) A **climate hazard** is a hazard linked to weather and climate. Australia’s main climate hazards are:

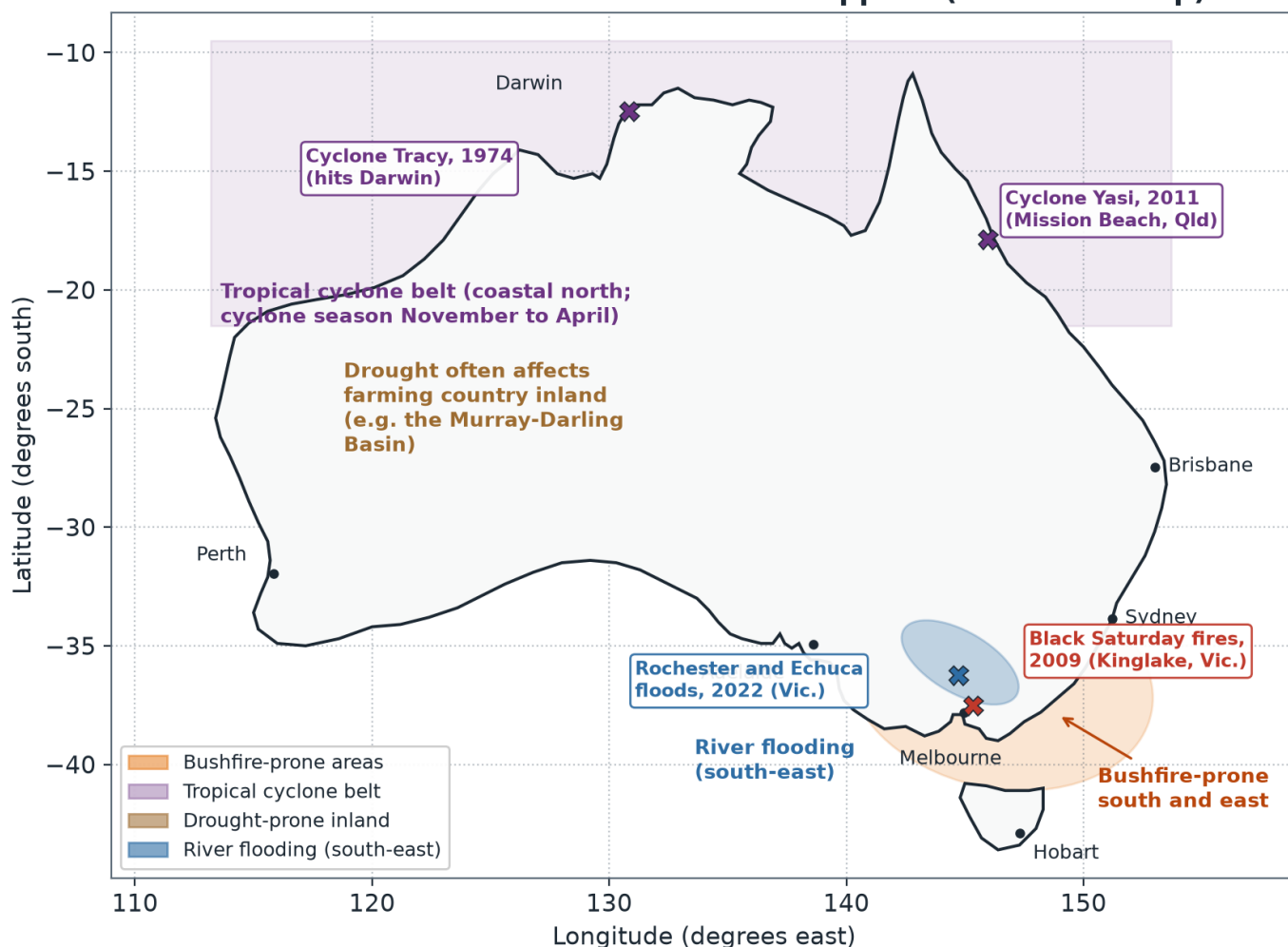
- **bushfires** — uncontrolled fires burning in the bush (grass, scrub or forest)
- **floods** — when water covers land that is normally dry, often when a river rises over its banks
- **droughts** — long periods with too little rain, so there is not enough water for people, farms and the environment
- **cyclones** — huge spinning storms with very strong winds and heavy rain, forming over warm seas
- **heatwaves** — several days in a row that are much hotter than normal

A hazard becomes a disaster when it hits places where people live and they cannot cope on their own. Australia is a dry, hot continent where rainfall changes a lot from year to year, so climate hazards are part of life here — but the *disasters* are what people work hard to prevent.

Where do climate hazards happen, and how often?

Hazards do not happen in every place. Each one has places where it is most likely, and a typical time of year. This is what **location** and **frequency** mean: *where* something happens, and *how often*.

Where do Australia's climate hazards happen? (schematic map)



Simplified outline drawn for this book; zone shapes are broad guides, not exact boundaries. City and event positions use real coordinates. Retrieved 25 August 2026.

A labelled map of Australia showing where cyclones, bushfires, droughts and floods are most common, with key cities and four famous hazard events marked

Figure 1 — Where Australia's climate hazards happen. This map is a simple guide, not an exact boundary map. Locations of cities and events are real; the coloured zones show where each hazard is most common.

Reading Figure 1:

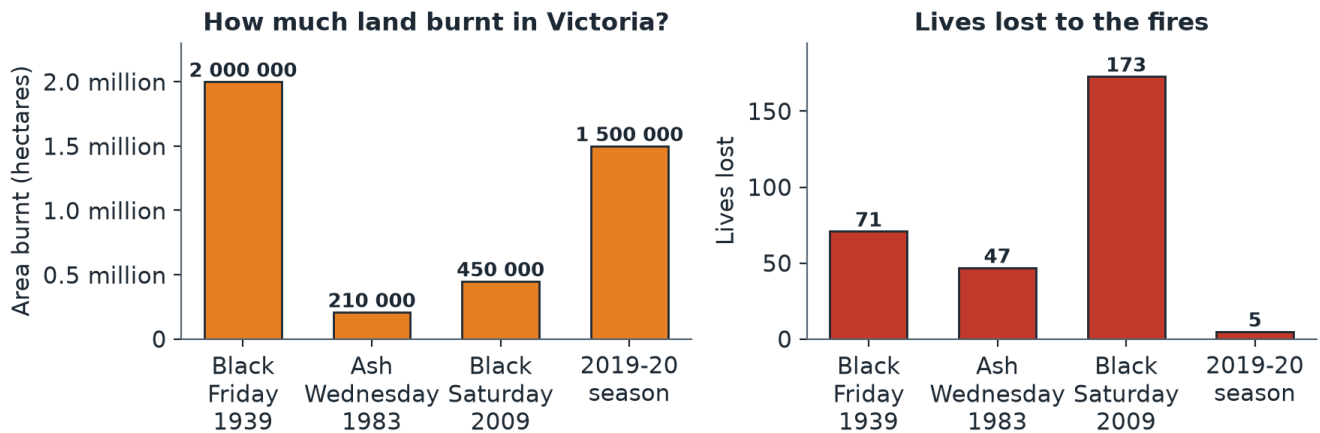
- **Cyclones** cross the coast of northern Australia, roughly between November and April (the wet season). Towns such as Darwin and Cairns live with cyclone risk every year.
- **Bushfires** are most common in southern and eastern Australia, where hot, dry, windy summers meet thick bush. Victoria sits inside Australia's highest bushfire risk zone. Most summers, somewhere in the south-east has serious fires.
- **Droughts** can spread over huge areas of inland Australia, including the Murray–Darling Basin, Australia's biggest farming region. Droughts are measured in years, not days.
- **Floods** happen along rivers and creeks after very heavy rain, from the tropics all the way to Victoria. Towns built near rivers, like Rochester in northern Victoria, can flood more than once in a decade.

Check: Point to Darwin on Figure 1. Which two hazards could Darwin face? (*Cyclones — it sits in the cyclone belt — and flooding from heavy tropical rain.*)

Learn: bushfires — Victoria's most feared hazard

Victoria has some of the most dangerous bushfires in the world. Its summers can be hot, dry and windy — the three ingredients fires need to spread. Some Victorian bushfires have become famous because of how much damage they did.

Four big bushfire events in Victoria



Source: 2009 Victorian Bushfires Royal Commission; Royal Commission into National Natural Disaster Arrangements (2020); state records. Retrieved 25 August 2026. 2019-20 deaths are the Victorian toll.

A two-panel bar chart comparing four famous Victorian bushfire events: hectares burned and lives lost for Black Friday 1939, Ash Wednesday 1983, Black Saturday 2009, and the 2019-20 season

Figure 2 — Four famous Victorian bushfire events. Hectares means area of land: one hectare is about the size of a football ground.

What the numbers say:

- **Black Friday, January 1939:** about 2,000,000 hectares burned across Victoria and 71 people died. It remains one of the largest fire events ever recorded in Victoria.
- **Ash Wednesday, February 1983:** fires in Victoria and South Australia killed 75 people. In Victoria, about 210,000 hectares burned.
- **Black Saturday, 7 February 2009:** on Victoria's hottest recorded day at the time (46.4 °C at Hopetoun), more than 400 fires burned. About 450,000 hectares burned, 2,029 homes were destroyed and 173 people died — Australia's deadliest bushfire disaster. In the town of Marysville, nearly every house was destroyed.
- **The 2019–20 season (the Black Summer):** about 1,500,000 hectares burned in Victoria alone, and 33 people died in fires across Australia.

Word watch: the people who fight bushfires are called **firefighters**. In Victoria, most of them are **volunteers** — people who do the job without pay, as a service to their community. The Country Fire Authority (CFA) has about 34,000 volunteers in around 1,200 brigades across Victoria.

Knowing when to act: Fire Danger Ratings

One of the most important tools Victoria uses is the **Fire Danger Rating** — an official daily rating that tells people how dangerous a fire would be if one started, and what they should do. The ratings below are used right across Australia under the Australian Fire Danger Rating System (AFDRS), which started on 1 September 2022. The words *Moderate*, *High*, *Extreme* and *Catastrophic* are the official rating names — learn them as labels, like the names on a map key.

Fire Danger Ratings used in Australia from 1 September 2022 (AFDRS)

Rating	Your action	What the rating means
No rating	What to do: No planned action needed.	What it means: Fires unlikely
Moderate	What to do: Plan and prepare.	What it means: Most can be controlled
High	What to do: Be ready to act.	What it means: Fires can be dangerous
Extreme	What to do: Take action now to protect life and property.	What it means: Fires spread quickly
Catastrophic	What to do: For your survival, leave bushfire risk areas.	What it means: Fires cannot be controlled

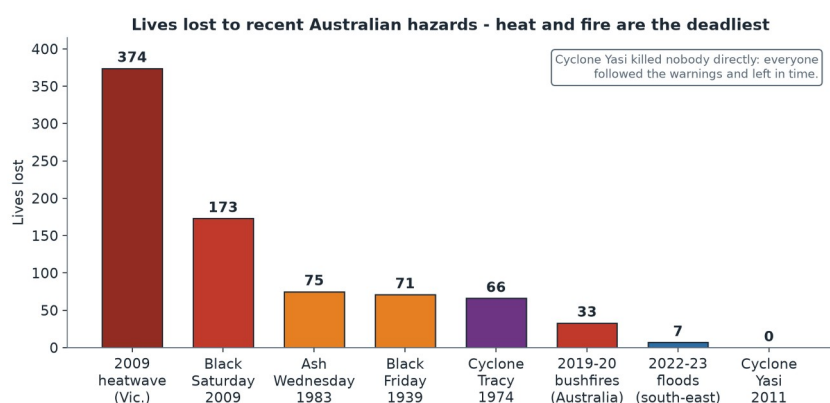
Ratings and action messages as published with the Australian Fire Danger Rating System, adopted nationally 1 September 2022. Retrieved 25 August 2026.

The four Australian Fire Danger Ratings with the official action message for each, from No rating through Moderate, High and Extreme to the highest rating

Figure 3 — The Fire Danger Ratings used in Australia from 1 September 2022, with the official action message for each. On the highest-rated days the official message is to leave bushfire-risk areas early.

Counting the cost: heatwaves too

Some climate hazards kill people quietly, without wrecking buildings. **Heatwaves** are Victoria's deadliest climate hazard: the heatwave before Black Saturday in late January and early February 2009 killed 374 people in Victoria — more than any single bushfire, flood or cyclone in Australian records.



Sources: Victoria Chief Health Officer (374, heatwave 2009); 2009 Victorian Bushfires Royal Commission (173); state records and royal commissions (75; 71); NT research (66); Royal Commission into National Natural Disaster Arrangements (33 direct, 2019-20); flood records (7); cyclone records (0 direct for Yasi). Retrieved 25 August 2026.

A bar chart of lives lost in Australia's major climate hazard events, showing heatwaves as the deadliest, followed by Black Saturday, Ash Wednesday, Black Friday, Cyclone Tracy, the 2019-20 fires and recent floods, with Cyclone Yasi at zero

Figure 4 — Lives lost in major Australian climate hazard events. Cyclone Yasi (2011) is at zero on purpose: it was one of the strongest cyclones ever to cross the Queensland coast, yet nobody died in it, because everyone followed the warnings and left in time. Warnings save lives.

What did these events cost?

The impacts of a hazard come in three kinds of costs. These three words are geography words you will keep using:

- **Economic costs** — money and property: destroyed homes, lost farm crops, closed businesses, the cost of rebuilding.
- **Social costs** — impacts on people: deaths and injuries, families losing their homes, stress, years of rebuilding lives.
- **Environmental costs** — impacts on the natural world: forests and habitats burned or flooded, animals killed or left without food or shelter, ash and soil washed into rivers.

The three kinds of cost of Black Saturday, 7 February 2009

Economic (money)	- 2,029 homes destroyed - each one costs money to replace - Farms, sheds, fences, machinery and livestock lost - Shops and towns shut, so jobs and pay were lost for months - Billions of dollars spent on rebuilding
Social (people)	- 173 people killed, hundreds injured - Whole towns lost: in Marysville nearly every house was destroyed - Survivors sad, frightened or homeless for years afterwards - Schools and sports clubs closed or rebuilt
Environmental (nature)	- 450,000 hectares of bush and farmland burnt - Tens of thousands of native animals killed - Soil, creeks and air quality damaged; forests take decades to regrow

Source: 2009 Victorian Bushfires Royal Commission. Retrieved 25 August 2026. The table sorts real impacts into the three cost kinds; 'billions' and 'tens of thousands' are order-of-magnitude statements, not exact counts.

A three-row table model sorting Black Saturday impacts into economic, social and environmental costs

Figure 5 — Sorting the costs of Black Saturday (2009) into the three kinds. Very large money figures are shown as ranges in the table because exact totals vary between official reports; all specific numbers (homes, lives, hectares) are from the official 2009 Victorian Bushfires Royal Commission records.

Learn: cyclones, floods and droughts

Cyclone Tracy: a city rebuilt

On Christmas Eve 1974, **Cyclone Tracy** hit Darwin. It was one of the most destructive cyclones in Australian history.

Christmas 1974: Cyclone Tracy and Darwin

Every house below stands for 10 of Darwin's houses, 1974



8 houses crossed out of 10 = about 80 in every 100 were destroyed

25,000 of 47,000 people lost their homes in one night

Source: records of Cyclone Tracy, Darwin, 25 December 1974 (66 deaths; about 80% of houses destroyed; 25,000+ homeless). Retrieved 25 August 2026.

A pictograph of ten houses with eight crossed out, and a bar showing 25,000 of Darwin's 47,000 people lost their homes in one night

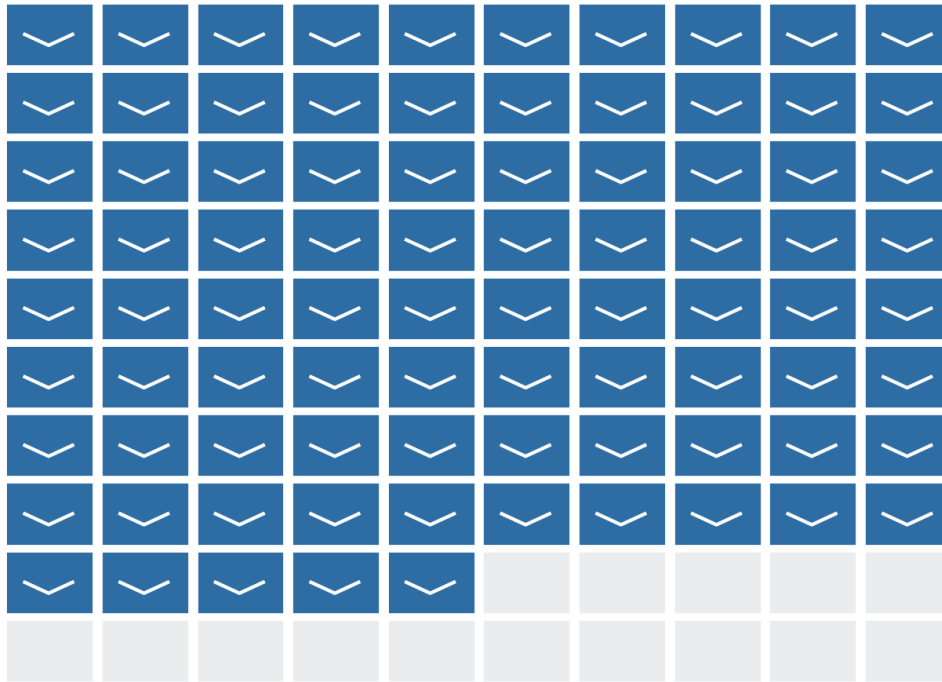
Figure 6 — What Cyclone Tracy did to Darwin's houses, 24–25 December 1974: about 8 in every 10 homes were wrecked or damaged, and 66 people died. Most of Darwin was rebuilt afterwards — a recovery effort that took years.

Cyclone Yasi crossed the Queensland coast near Mission Beach in February 2011. It caused about 3,500 million dollars of damage, mainly to banana crops, buildings and roads, but nobody died: people were warned early and moved to safe places. Compare Figure 6 and the Yasi bar in Figure 4 — preparation changes the outcome.

Floods: Rochester, October 2022

In October 2022, days of heavy rain filled the Campaspe River in northern Victoria. The town of **Rochester** flooded badly — and nearby **Echuca** on the Murray River worked hard to keep its levee (a wall built to hold flood water out) holding.

Rochester, Victoria: the October 2022 flood, home by home



Each square = 1 home in 100. 85 of every 100 Rochester homes were flooded.

Rochester (Campaspe River) and Echuca (Murray River), October 2022. Seven people died across the state in the 2022-23 floods.

Source: October 2022 flood records, Victoria (85% of Rochester homes inundated). Retrieved 25 August 2026.

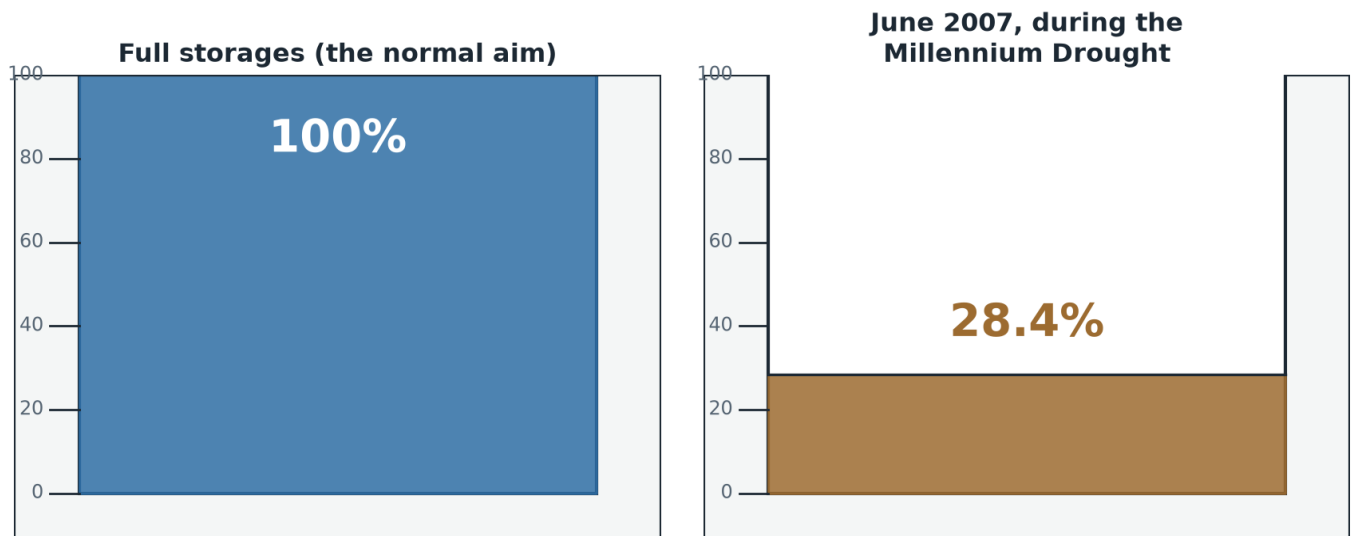
A hundred-grid showing 85 of 100 squares flooded, representing roughly how much of Rochester was under water in October 2022

Figure 7 — Rochester's flood, October 2022: most of the town was under water. The seven people who died in the south-eastern Australia floods of 2022–23 each had a name, a family and a story. (The 85-square grid is a visual guide to “most of the town”, based on emergency reports.)

Droughts: the slow hazard

Floods and cyclones hit in hours or days. **Droughts** arrive slowly, over months and years — but their impacts can be just as big. The **Millennium Drought** (roughly 1996–2010) was south-eastern Australia's driest long stretch since European records began, with the least rain between 2001 and 2009.

How low did Melbourne's water storages fall?



Source: Melbourne Water. The drought ran roughly 1996-2010, worst 2001-2009. Retrieved 25 August 2026.

Two dam basins side by side: one full at 100 per cent, one at just 28.4 per cent, labelled June 2007 during the Millennium Drought

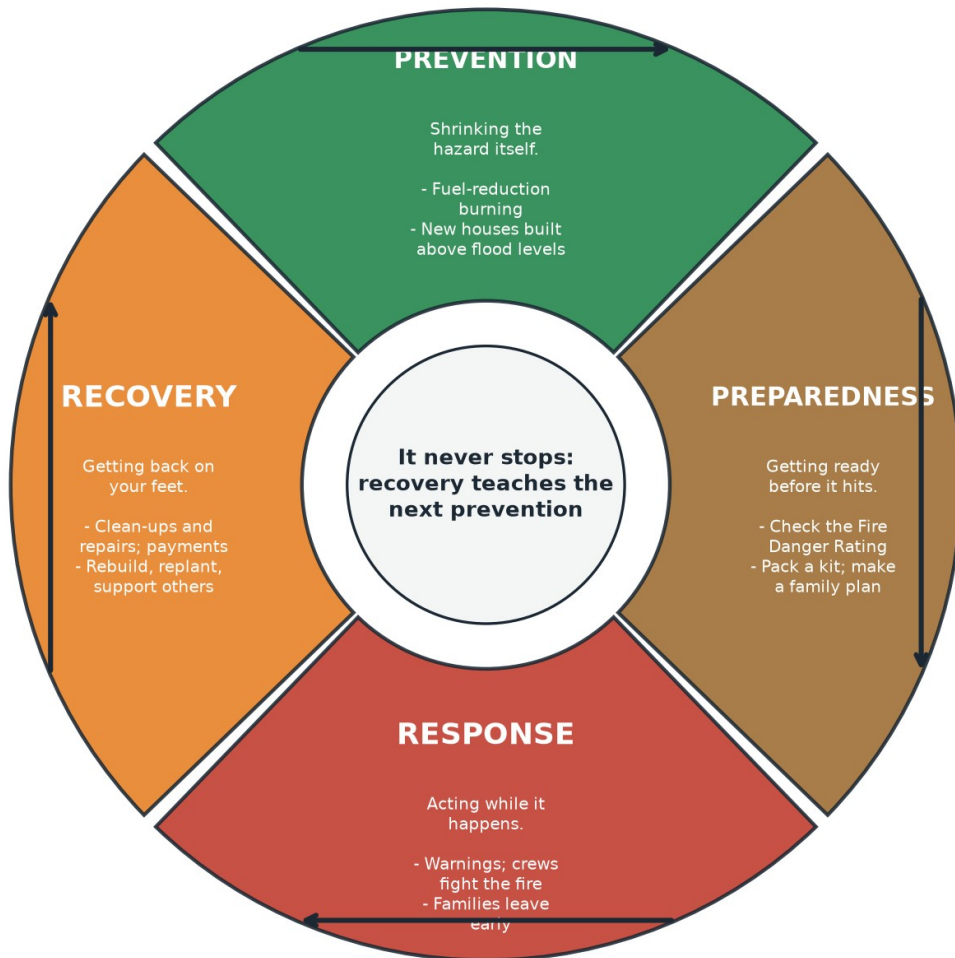
Figure 8 — Melbourne's water storages (the dams that hold the city's drinking water) at full, and at their lowest point of the Millennium Drought: 28.4 per cent full in June 2007. When storages fall this low, cities impose water restrictions and look for new water sources — Melbourne later built a plant to take salt out of sea water, and linked its dams so water could be moved where needed.

Droughts cost farms the most: crops fail, animals have no feed, and farm families face years of low income. Towns can run short of drinking water. Droughts also hurt the environment, as rivers run low and wetlands dry out.

Learn: managing hazards — the four-stage cycle

People cannot stop the weather. But they can reduce the harm hazards do. In Australia, communities manage hazards through four connected stages: **prevention, preparedness, response and recovery**.

The hazard management cycle: prevention - preparedness - response - recovery



Example actions are real measures used in Victoria (CFA, VicSES, Victorian Government). Retrieved 25 August 2026.

A four-part wheel showing prevention, preparedness, response and recovery as connected stages with real Victorian examples in each quadrant

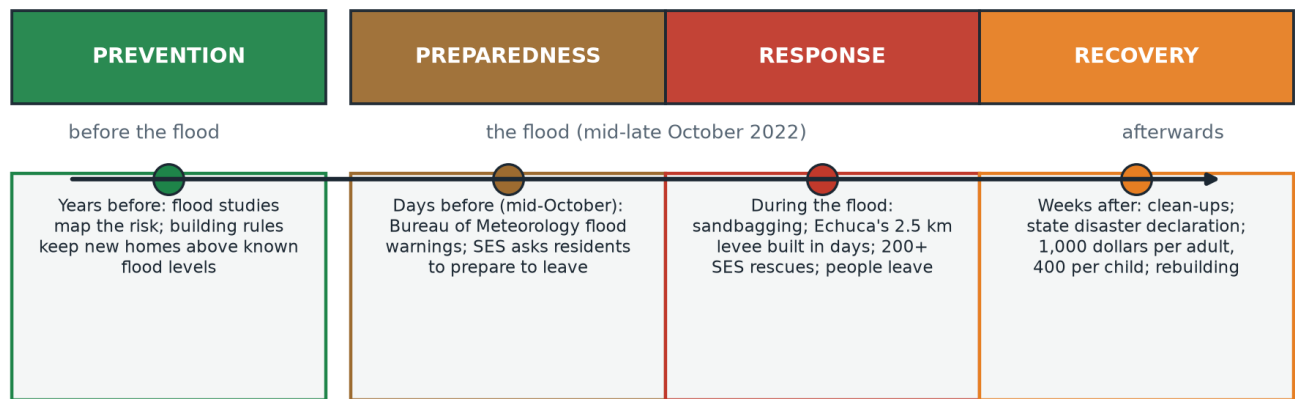
Figure 9 — The hazard management cycle. Each stage has real Victorian examples. Notice the middle: recovery teaches the next prevention, so the wheel never stops.

- **Prevention** — stopping a hazard from happening, or reducing how bad it can be. Examples: controlled burning that removes dry fuel before fire season; building rules that keep new homes above known flood levels.
- **Preparedness** — getting ready before a hazard arrives. Examples: checking the Fire Danger Rating; packing an emergency kit; making a family plan for what to do and where to go.
- **Response** — acting while the hazard is happening. Examples: emergency warnings; firefighters and SES crews rescuing people; families leaving early.
- **Recovery** — getting back to normal afterwards. Examples: clean-ups and repairs; government payments to help families; rebuilding homes and businesses.

Australia's emergency services carry much of this work: the CFA and Fire Rescue Victoria for fire, the Victoria State Emergency Service (VicSES) for floods and storms, and Emergency Management Victoria coordinating warnings and plans. The Bureau of Meteorology watches the weather and issues the official warnings that start the response.

One flood through all four stages

One flood, four stages: Rochester and Echuca, October 2022



Sources: October 2022 flood records - SES rescues, Echuca levee, Victorian Government disaster declaration and recovery payments. Retrieved 25 August 2026.

A horizontal timeline of the October 2022 Rochester-Echuca flood showing prevention, preparedness, response and recovery actions in order

Figure 10 — The October 2022 Rochester–Echuca flood, stage by stage. Prevention happened years earlier; preparedness, days earlier; response, during the flood; recovery, for weeks and months after.

Model text: a family emergency kit

MY FAMILY EMERGENCY KIT

☒	Water	- 3 litres a person a day
☒	Food	- tins, no fridge or cooker
☒	First aid kit	- plus family medicines
☒	Torches	- with spare batteries
☒	Radio	- to hear warnings and news
☒	Phone chargers	- plus a charged power pack
☒	Documents	- IDs and bank papers, in a bag
☒	Cash	- small notes, in case cards fail
☒	Warm clothes	- shoes, raincoats, blankets
☒	Pet food	- lead or carry box

Pack once a year (say, at the start of bushfire season) and keep it where everyone can grab it.

Item list follows Victorian emergency services' preparedness advice (CFA, VicSES, EMV). Retrieved 25 August 2026.

A checklist of ten emergency kit items with short reasons, drawn as a carry case titled My Family Emergency Kit

Figure 11 — A model emergency kit, based on Victorian emergency services' advice. Families are told to pack one kit and keep it where everyone can find it fast.

Check: For each of these actions, name the stage of the cycle: (a) a family packs their kit in November; (b) SES crews rescue people from a flooded street; (c) a town uses flood maps to plan where new houses may be built; (d) the government pays clean-up grants after a fire. (*a preparedness; b response; c prevention; d recovery.*)

Worked demonstrations

Worked demonstration 1 — Reading the fire-history chart (Figure 2)

Task: Which Victorian bushfire event in Figure 2 burned the largest area, and how many times more land did it burn than Black Saturday?

Watch how a strong answer is built:

1. **Read the task first.** It asks two things: which event burned the most, and a comparison with Black Saturday.
2. **Find the right panel.** The left-hand panel shows hectares burned.
3. **Read the bars.** Black Friday 1939 has the tallest bar: 2,000,000 hectares. Black Saturday 2009 shows 450,000 hectares.

4. **Do the comparison.** $2,000,000 \div 450,000 \approx 4.4$.
5. **Answer in a full sentence with the source.**

Model answer: *Black Friday in January 1939 burned the largest area — about 2,000,000 hectares across Victoria (Figure 2, left panel). This is more than four times the area burned on Black Saturday in 2009 (about 450,000 hectares).*

Worked demonstration 2 — Sorting costs and sorting stages

Part A: sorting costs. Sort these Black Saturday facts into economic, social or environmental costs:

1. 2,029 homes were destroyed.
2. 173 people were killed.
3. About 450,000 hectares of forest and farmland burned.
4. The total cost of the fires was put at more than 4,000 million dollars.
5. Ash washed into creeks, hurting water quality and fish.

Watch the sort: ask “*who or what is hurt?*” — money and property → **economic**; people and communities → **social**; the natural world → **environmental**.

Fact	Kind of cost	Why
1	Economic (with a social side)	Homes are property, but losing them also hurts families — some costs fit two kinds
2	Social	People’s lives
3	Environmental	Forest and land
4	Economic	Money
5	Environmental	Creeks and fish

Part B: sorting stages. Now sort these Rochester flood actions into prevention, preparedness, response or recovery:

1. Years earlier, flood studies mapped which streets would flood.
2. Days before, the Bureau of Meteorology issued flood warnings.
3. During the flood, SES crews rescued more than 200 people.
4. Weeks after, families received disaster recovery payments.

Model sort: 1 → prevention (knowledge that stops bad choices); 2 → preparedness (getting ready); 3 → response (acting during); 4 → recovery (rebuilding afterwards). See Figure 10 for the same four steps drawn as a timeline.

Practice questions

Guided practice — start from the figures.

Q1. Look at Figure 1. Which climate hazard is most common in (a) northern Australia, and (b) the south-east, including Victoria?

Q2. Look at Figure 1. Name the city marked on the map that sits inside Australia’s cyclone belt, and the Victorian town marked where the 2009 Black Saturday fires burned.

Q3. Look at Figure 2. Which event killed the most people, and in what year did it happen?

Q4. Look at Figure 2. About how many times more land burned in the Black Friday event than in Black Saturday? Show your working.

Q5. Look at Figure 3. What is the official action message for an *Extreme* fire danger day? What does the highest rating tell people to do?

Q6. Look at Figure 4. Which climate hazard has killed the most people in the events shown? What evidence from the chart tells you this?

Q7. Look at Figure 6. About what fraction of Darwin's homes were wrecked or damaged by Cyclone Tracy?

Q8. Copy and complete this table for the Millennium Drought using Figure 8 and the Learn section:

Question	Your answer
Roughly what years did it run?	
How full were Melbourne's storages at the lowest point, and when?	
One way Melbourne responded	

Independent practice — no figure prompts; use your own words and evidence you remember.

Q9. Explain, in two or three sentences, why hazard management is drawn as a circle (Figure 9) rather than a straight line with an end.

Q10. Choose one climate hazard from this section. Write one paragraph explaining its impacts on both environments and communities. Include at least three real numbers or names from this section.

Q11. It is November: bushfire season has started. List three preparedness steps a Victorian family should take, and give a reason for each.

Q12. "Good warnings save lives." Use two events from this section as evidence for this claim. For each event, say what happened and what the evidence shows.

Extended evidence task: answer the key question

Key question (in this book's words): how can we reduce the harm bushfires do to people and places?

Choose **one** of these ways to answer:

- **Write** about one page (roughly 150–200 words).
- **Map/diagram:** draw a one-page labelled diagram (for example, the four-stage cycle filled with real bushfire examples).
- **Speak:** record or present a two-minute talk.

Your answer **must**:

1. use all four stages — prevention, preparedness, response and recovery;
2. include at least three real pieces of evidence from this section (dates, numbers or named events, such as Black Saturday 2009 or the AFDRS ratings);
3. name at least one real Victorian place from this section;
4. use the key words *hazard*, *impact* and *community* correctly.

Success checklist: every stage explained ☐ three real evidence points ☐ a named Victorian place ☐ key words used correctly ☐ my own words ☐.

Answers

Q1. (a) Cyclones (and flooding from heavy tropical rain); (b) bushfires.

Q2. Darwin; Kinglake.

Q3. Black Saturday, 2009 (173 people).

Q4. $2,000,000 \div 450,000 \approx 4.4$ — a little more than four times.

Q5. *Extreme*: “Take action now to protect life and property.” Highest rating (*Catastrophic*): “For your survival, leave bushfire risk areas.”

Q6. The 2009 heatwave in Victoria — its bar (374) is the tallest in Figure 4.

Q7. About eight in ten (about 80%).

Q8. Roughly 1996–2010 (least rain 2001–2009); 28.4% full in June 2007; any one correct response — e.g. water restrictions, building a plant to take salt out of sea water, linking dams so water could be moved.

Q9 (sample points). Because recovery teaches people how to prevent or reduce the next disaster; each event changes what communities do next time, so the stages keep going around.

Q10 (sample points, bushfire example). Black Saturday 2009: 173 lives lost and 2,029 homes destroyed (social costs); about 450,000 hectares of forest and farmland burned (environmental); towns like Marysville lost nearly everything and rebuilding homes and businesses cost huge amounts of money (economic).

Q11 (sample points). Check the Fire Danger Rating often; pack an emergency kit (water, food, radio, torches, copies of important papers); make a family plan about where to go on high-risk days — each step means the family can act early instead of deciding in a panic.

Q12 (sample points). Cyclone Yasi 2011: one of the strongest cyclones to cross the Queensland coast, yet zero deaths because people followed warnings and left early. Compare Tracy 1974 (66 deaths) with modern events where warnings and evacuation are stronger — deaths fall when people are told early and act.

Extended task (model skeleton). Paragraph 1: introduce the hazard and the key question. Paragraph 2: prevention and preparedness (clearing dry fuels; AFDRS ratings; kits and plans). Paragraph 3: response and recovery (warnings; firefighters; Black Saturday lessons; payments and rebuilding). Final sentence: communities that work through all four stages lose fewer lives and rebuild faster.

Sources used in this section

All records retrieved 25 August 2026. Figures are original artwork made from these records; see each figure’s caption and `src/gen_le_*.py` notes for per-figure source detail.

- The teaching codes above, from `VC2_AS-CD-Elab_29-07-2026.csv` and `VC2_ASExtract-CD-Elab_29-07-2026.csv`.
- 2009 Victorian Bushfires Royal Commission — final summary (Black Saturday deaths, homes, area burned; via its Wikipedia summary page, “2009 Victorian bushfires”).
- Wikipedia: “Black Friday (1939 bushfires)”, “Ash Wednesday bushfires”, “2019–20 Australian bushfire season”, “Cyclone Tracy”, “Cyclone Yasi”, “Millennium Drought”, “2022 south-eastern Australia floods”, “Drought in Australia”, “2009 south-eastern Australia heat wave”, “Australian Fire Danger Rating System”.
- Bureau of Meteorology (official warnings service; hazard climatology).
- Country Fire Authority (CFA) — volunteer and brigade counts; Emergency Management Victoria and Victoria State Emergency Service — preparedness advice and October 2022 flood response records.
- Melbourne Water — water storage levels during the Millennium Drought.
- United Nations Office for Disaster Risk Reduction (UNDRR) — definition of “hazard” (put into plain words for Year 5).