

Economics and Business 5

Chapter 3 — Investigating: asking, gathering and making sense of data

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Contents

Section	Page
Asking good questions about business, work and money	2
Finding information and putting it in order	13
Reading graphs, tables and text to spot patterns and trends	25
Checking where information comes from	35

Asking good questions about business, work and money

Economics and Business 5 · Chapter 3 — Investigating: asking, gathering and making sense of data · Section 3A

Skill: VC2HE6S01. This section draws on VC2HE6S01.E01 and VC2HE6S01.E02 (the two examples VCAA suggests for this skill).

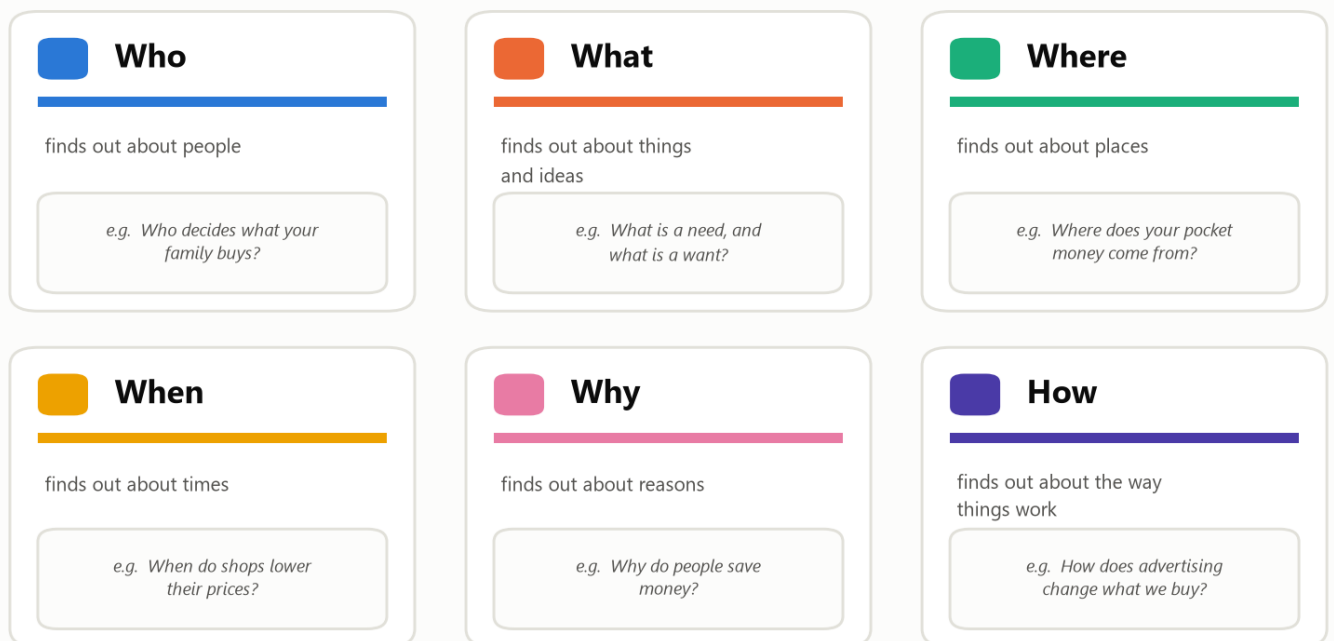
Every investigation in this book — about needs and wants, tax, jobs, shops, ads and prices — starts the same way: with a good question. In this section you learn how to build questions worth asking, and how to turn one big idea into lots of them.

Theory

A question is where every investigation starts. You already ask hundreds of questions every week. An *investigable* question is one that someone could actually answer — by asking people, by looking at facts and numbers, or by counting and checking. “Is chocolate nice?” is fun to ask, but it is only a taste. “How many students in our class buy a chocolate bar with their pocket money each week?” is a question a survey can answer.

Question words do different jobs. The word you start with changes what you find out.

Question words — the tools you use to investigate



Every research question starts with one of these words.

Six cards showing the question words who, what, where, when, why and how, what each word finds out, and an example money question for each

Closed and open questions. Some questions close quickly with a short answer. Others stay open, with many possible answers, and those are the ones that start a real investigation.

Closed and open questions

Closed questions

can be answered with a quick, short answer — a yes or no, a number, or one word

Do you buy lunch at school on Fridays?

How much does a letter stamp cost?

Is a bike a need or a want?

Good for collecting quick facts, like in a class survey.

Open questions

have many possible answers. They make you think harder and for longer

Why do families pick some brands and not others?

How could our class raise money for the school garden?

What makes people trust one shop more than another?

Good for investigating ideas in depth.

An investigation usually needs both: closed questions to collect facts, open questions to dig into them.

Two panels: closed questions give a quick short answer and are good for collecting facts; open questions have many possible answers and are good for investigating in depth

Building a question from three parts. A clear question is built like a sentence in three pieces: a question word, the thing it is about, and what you want to know.

Build a question from three parts

question word		about (who or what)		what you want to know
Why	+	stamp prices	+	go up
How	+	advertising	+	change what we buy
	+		+	

your turn

Put together:

Why do stamp prices go up?

How does advertising change what we buy?

Three parts, one clear question - and the question word does the job of the first box.

A three-column builder: a question word, plus the thing it is about, plus what you want to know, joined into full example questions, with a blank row for the reader

Four kinds of research questions. Different questions do different jobs. This skill comes with four named kinds of question. One word in that list — *ethical* — is a word VCAA uses but does not define, so this section gives it one clear meaning: an **ethical question** is a question about what is fair and right, and about how people should act. Every ethical question in this section can be answered on that meaning alone.

Four kinds of research questions

Different questions do different jobs.

Probing questions

look for details and dig deeper

e.g. What makes up the price of a \$3 loaf of bread?

Open-ended questions

bring out lots of ideas

e.g. What could our class sell at the school fair?

Practical questions

help put a plan into action

e.g. What skills would we need to run a stall at the school fair?

Ethical questions

ask what is fair and right

e.g. Is it fair for ads to try to make kids want things?

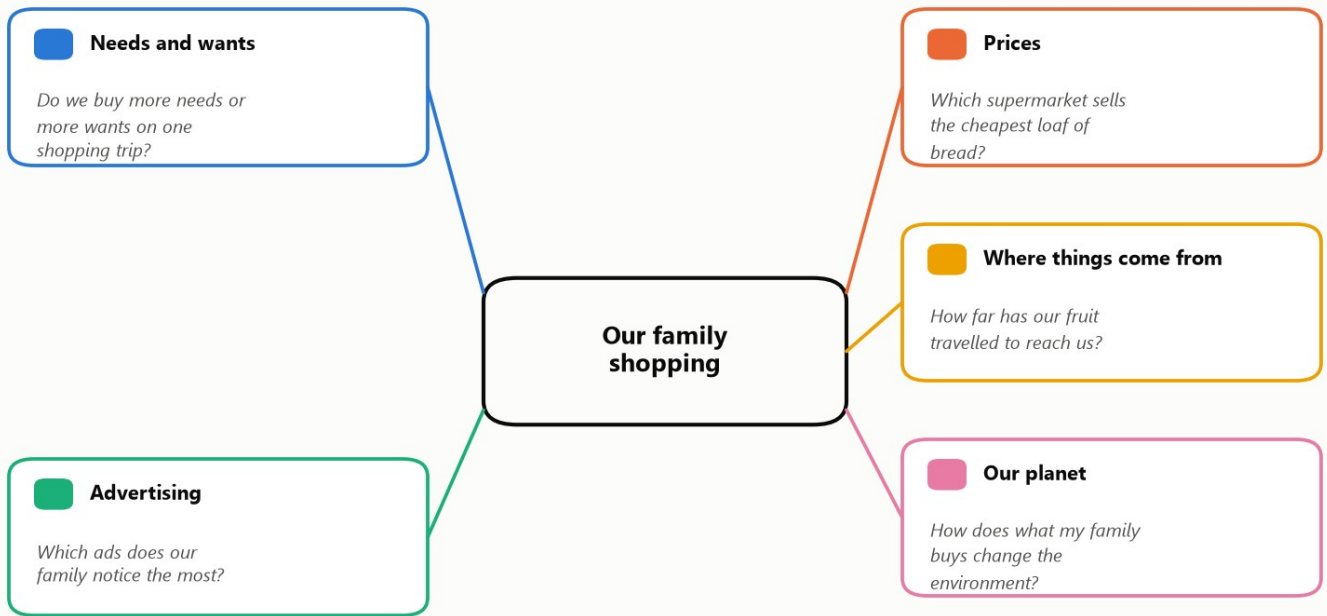
One topic can give you all four kinds.

Pick the kind that fits the job you want the question to do.

Four cards: probing questions look for details, open-ended questions bring out lots of ideas, practical questions help put a plan into action, and ethical questions ask what is fair and right, each with an example

Mind-mapping an idea. To turn one big idea into lots of questions, put the idea in the middle of the page and draw a branch for every part of it you can think of. Each branch then gives you a question. This is called a **mind map**.

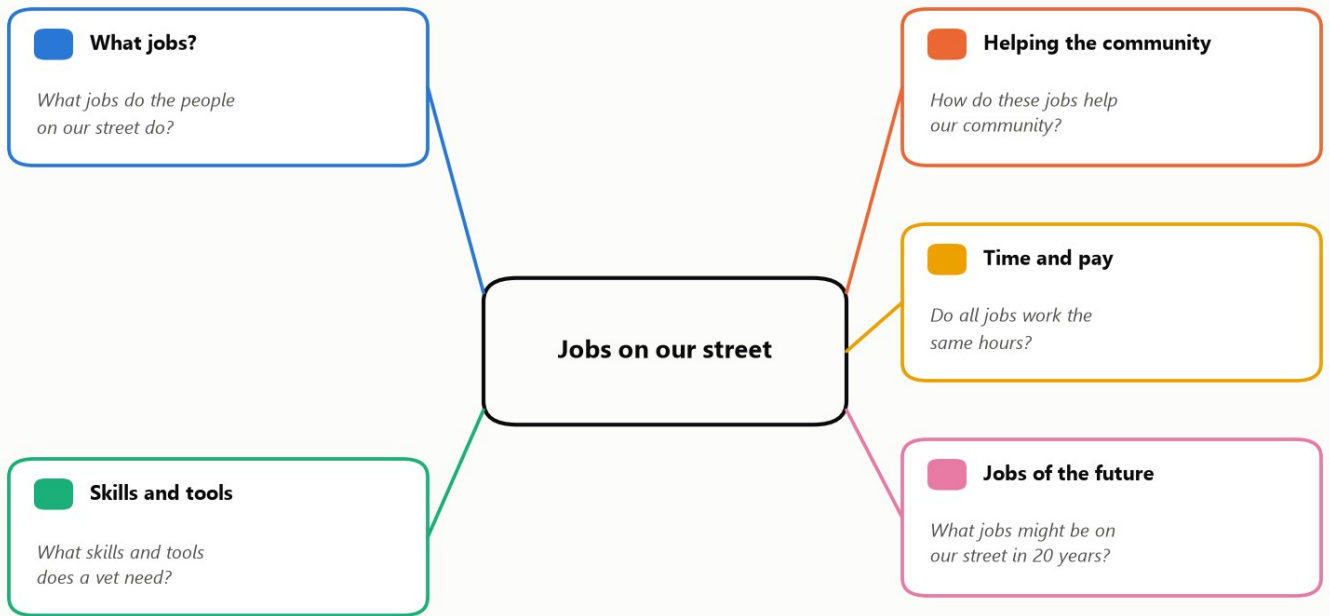
Mind map: from one idea to five research questions



Every branch is a different place to look - and every question on it can be investigated.

A mind map with 'our family shopping' in the middle and five branches — needs and wants, prices, advertising, where things come from, and our planet — each branch carrying one research question

Mind map: 'jobs on our street'



The same trick works for any topic: mind-map it, then turn each branch into a question.

A second mind map with 'jobs on our street' in the middle and five branches — what jobs, helping the community, skills and tools, time and pay, and jobs of the future — each carrying one research question

The checklist. Before you investigate a question, check it is ready.

Is your question ready to investigate?



It asks one clear thing.

If it has two questions in one, split it in two.



It says who or what it is about.

Name the people, things or places.



I can find an answer by asking, looking or counting.

A survey, a price tag, a chart or a website can answer it.



It starts with a question word.

who - what - where - when - why - how



It matters.

The answer will help someone decide or understand.

Ready! "How much has a letter stamp gone up since 2014?"

A five-point checklist poster: the question asks one clear thing, says who or what it is about, can be answered by asking looking or counting, starts with a question word, and matters

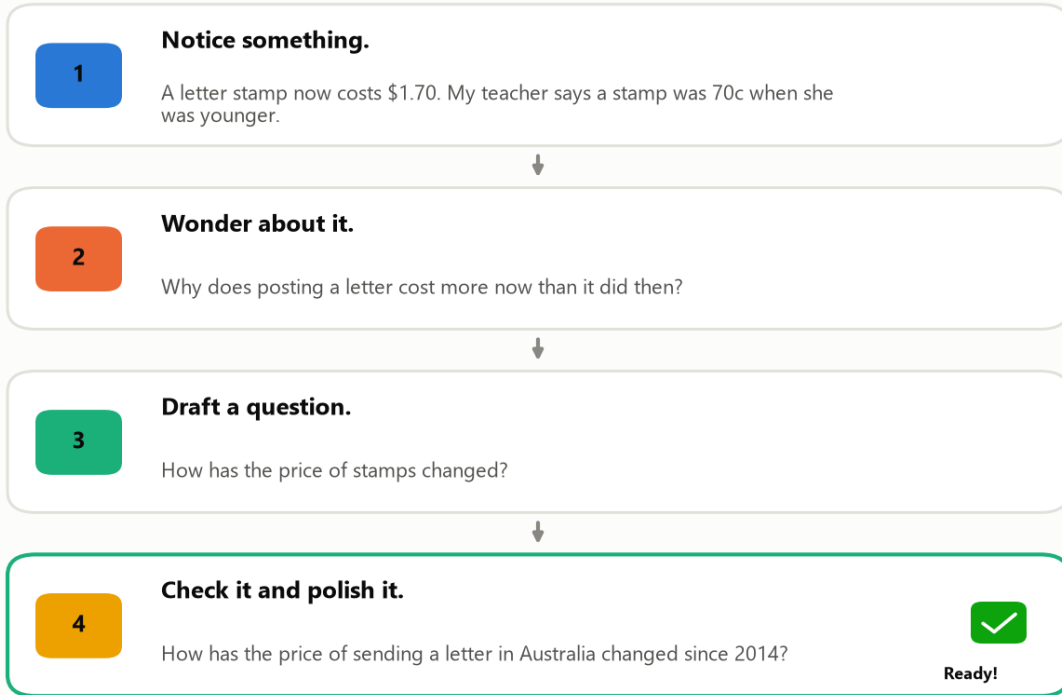
Worked examples

Example 1 — watch how it works: from a wonder about stamps to a research question

Mia notices that a letter stamp now costs **\$1.70**. Her teacher says a stamp cost **70c** when she was at school. Here is how Mia turns her wonder into a ready research question.

What Mia does	What she says or writes	Why it works
1. Notices something	"A stamp costs \$1.70 now. It used to cost 70c."	A true fact from real life gives her something to ask about.
2. Wonders about it	"Why does posting a letter cost more now?"	The wonder is interesting, but it is not ready yet.
3. Drafts a question	"How has the price of stamps changed?"	Better — but it still does not say where or when.
4. Checks and polishes it	"How has the price of sending a letter in Australia changed since 2014?"	Now it names the place (Australia) and the time (since 2014), so someone could answer it.

From a wonder to a research question



Same topic, better question - because someone could actually answer it.

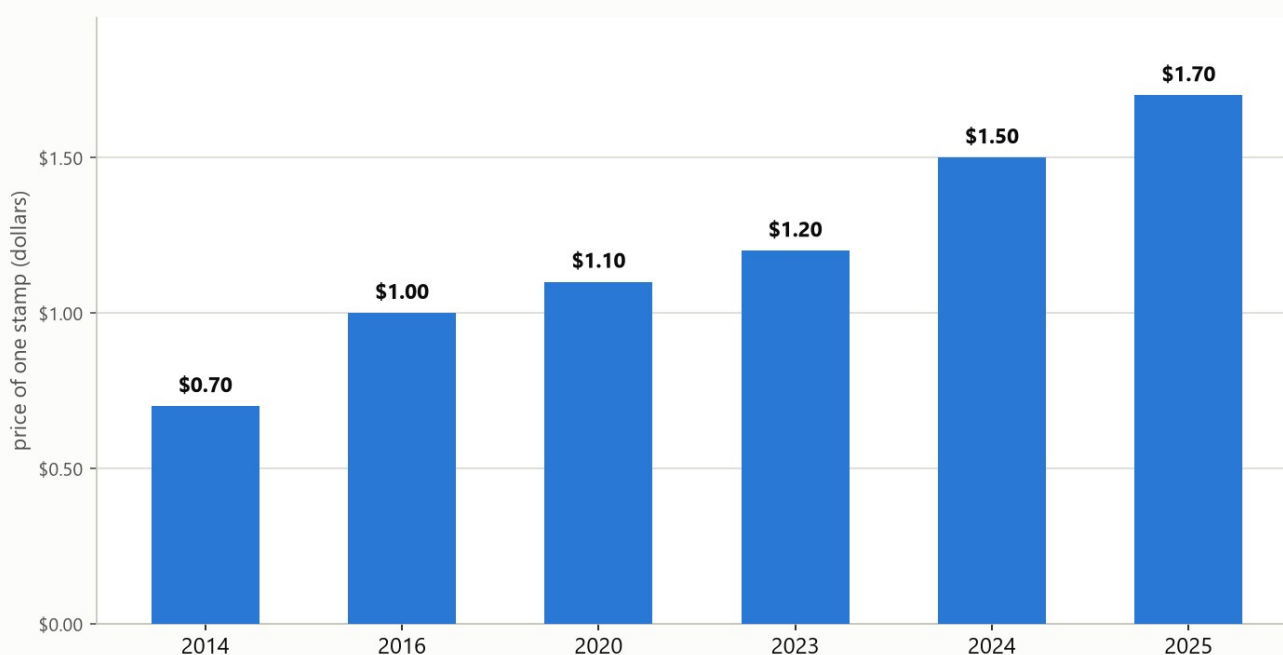
A four-step flow from noticing a fact, to wondering, to drafting a question, to a checked and polished research question marked ready

Mia's polished question can be answered with real facts. Here is the data she finds:

Year	Price of one letter stamp
2014	\$0.70
2016	\$1.00
2020	\$1.10
2023	\$1.20
2024	\$1.50
2025	\$1.70

Source: Australian Competition and Consumer Commission (ACCC), Price Notifications Register, acc.gov.au; Australia Post stamp prices, auspost.com.au. Retrieved 26 August 2026.

The price of an Australian letter stamp, 2014-2025



Source: ACCC Price Notifications Register, accc.gov.au; Australia Post stamp prices, auspost.com.au (retrieved 26 August 2026)

Column graph of the price of an Australian letter stamp for the years 2014, 2016, 2020, 2023, 2024 and 2025, rising from 70 cents to 1 dollar 70, with the source line beneath

Mia's question passes every point on the checklist: it asks one clear thing, it says what it is about (letter stamps in Australia) and when (since 2014), the graph can answer it, it starts with *how*, and it matters — it helps her understand why letters cost what they do.

Example 2 — watch how it works: mind-mapping the family shop

Tomas's class is investigating shopping. His group mind-maps the idea “our family shopping” and turns each branch into a question:

Branch	Research question	Kind of question
Needs and wants	Do we buy more needs or more wants on one shopping trip?	closed — a survey of receipts can count it
Prices	Which supermarket sells the cheapest loaf of bread?	closed — price tags can answer it
Advertising	Which ads does our family notice the most?	open — families will give many answers
Where things come from	How far has our fruit travelled to reach us?	probing — it digs for details
Our planet	How does what my family buys change the environment?	open — and ethical, because it asks what is the right thing to do

From one idea in the middle, Tomas's group now has five ready questions — each one names what it is about, and each one can be answered.

Practice questions

With a little help

Q1. Sort these questions into *closed* and *open*. (a) Do you buy lunch at school on Fridays? (b) Why do some ads stay in your head? (c) How many coins are in your money box? (d) What would make our school fete better? (e) Is a bike helmet a need or a want? (f) How does a shop decide what to put at eye level?

Q2. Match each question to its kind: *probing*, *open-ended*, *practical* or *ethical*. (a) What skills and tools would we need to run a lemonade stall? (b) Is it fair that some toys are advertised only to girls or only to boys? (c) What exactly goes into the price of a \$3 loaf of bread? (d) What could our class do to help people in our street?

Q3. These three questions are not ready. Fix each one so it passes the checklist. (a) Tell me about money. (b) Why do people buy things and where do they buy them and when? (c) Is stuff expensive?

Q4. Look at the stamp price graph in Example 1. (a) Write two questions the graph **can** answer. (b) Write one question the graph **cannot** answer, and say how you could find that answer instead.

Q5. A Year 5 class did a closed survey question: “Do you get pocket money?” — 19 students said yes and 7 said no. Write **one open question** that digs into that result.

Q6. Look at the “jobs on our street” mind map in the Theory. Pick any two branches and add one **new** question of your own to each.

On your own

Q7. Choose **one** topic: the goods and services tax (GST) on a \$30 birthday present — the GST is the 10% tax added to most prices — · an Australian entrepreneur (a person who starts a new business) · the jobs people do in your street · the ads you see in one hour of TV. For your topic, write one question of each kind: probing, open-ended, practical and ethical.

Q8. Mind-map one of these ideas: *saving for something big* · *our school canteen* · *pocket money*. Draw at least four branches and write one ready question on each branch.

Q9. This week, find one real price — on a shop sign, in a catalogue or on a website. Write it down with its **source** (where the information came from). Then write one closed question and one open question about that price.

Q10. You may ask the canteen manager three questions about lunch prices. Plan your three questions so that one is probing, one is practical and one is ethical.

Reasoning prompt

R1. “Why do people buy stuff?” and “What did students in our school buy at the canteen this term?” are both questions about buying. Which one is more ready to investigate? Name two checklist points that one passes and the other fails, and say how you would fix the weaker question without losing the idea.

Answers

Open questions have many right answers. These are samples — yours can differ and still be correct. Check each against the checklist.

Q1. Closed: (a), (c), (e). Open: (b), (d), (f).

Q2. (a) practical. (b) ethical. (c) probing. (d) open-ended.

Q3. Samples: (a) “How much pocket money do students in our class get each week?” (b) split it up, e.g. “Why do people choose one brand over another?” (c) “Which is more expensive today: a loaf of bread from the bakery or a loaf from the supermarket?” Each fix names one clear thing, and says who or what it is about.

Q4. (a) Samples: “How much did a stamp cost in 2020?” and “How much did the price rise between 2023 and 2025?” (b) Sample: “Why did the price rise in 2024?” — the graph shows the rise but not the reason; a source such as the ACCC website would explain it.

Q5. Sample: “What do students who get pocket money choose to save it for?”

Q6. Samples: for *time and pay* — “Which job on our street starts first?” For *jobs of the future* — “What new jobs might our street need when more people move in?”

Q7–Q10. Check each question against the checklist, and check each kind against the four cards. An ethical question should be about what is fair and right.

R1. The canteen question is more ready. It says who (students in our school) and what (what they bought), and canteen records or a survey can answer it. The first question asks one huge thing with no who, what place or what time, so nobody could answer it. Fix it by naming a group and a thing, e.g. “Why do Year 5 students choose the snacks they buy?”

Finding information and putting it in order

Economics and Business 5 · Chapter 3 · 3B

Owens: VC2HE6S02 (Skills — Investigating) **Draws on:** VC2HE6S02.E01 · VC2HE6S02.E02 · VC2HE6S02.E03 · VC2HE6S02.E04

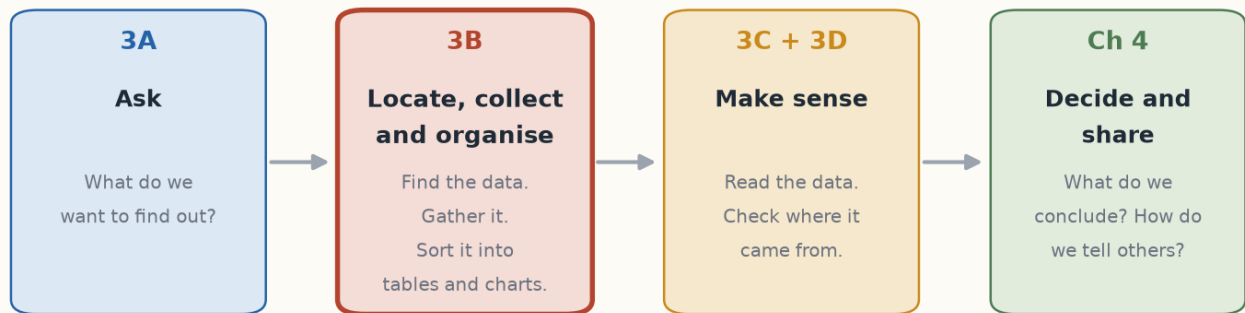
In 3A you learned to ask good questions. Here you go and find the facts to answer them. The questions and the data come from Chapters 1 and 2 — needs and wants, tax, work, advertising and prices. Reading what your organised data shows is 3C’s job, and checking that a source tells the truth is 3D’s job.

Teacher note. Teaching sequence: (1) place 3B in the inquiry with the map figure; (2) teach the five search steps and the two search-craft figures (key words; domain endings) — the domain lesson stops at *provenance as a clue to who runs a site*; whether a source is telling the truth is 3D, and scams and consumer law are Levels 7 and 8 (VC2HE8K07, VC2HE8K08), so do not extend there; (3) walk Worked example 1 (one shop’s cereal prices into a table) and Worked example 2 (two shops’ shoe prices: messy notes to sorted table to column chart); (4) run the with-help tasks; (5) teach the tally figure and the four project questions; (6) finish with the on-your-own tasks and the Q11 reasoning prompt. Data discipline: every price in this section is REAL, captured from woolworths.com.au and shoewarehouse.com.au on 26 August 2026 and stored in `src/_source_data/` — prices change, which is itself the teaching point of recording the date; the advertising tally figure is MODEL class data and is labelled so. Handoffs, do not re-teach: axis and scale construction is Mathematics Level 5 (Q9 coordinates with it); reading patterns and trends is 3C; verifying sources is 3D; judging value is 2A–2B — this section stops at collecting and organising. GST is taught in 1B and is only glossed here. Glossary given at first use: locate, collect, organise, information, data, source, search engine, catalogue, index, key words, domain name, provenance, tally. “Entrepreneur” is deliberately not used in student-facing text (E01’s entrepreneur option is illustrative, per D9; the price comparison carries it). No First Nations content appears in this section (Rule 1; zero impact in this band per TOC D5).

What you are learning

The doing words. To **locate** means to find. To **collect** means to gather together. To **organise** means to put into an order that makes sense. **Information** is facts or news about something. **Data** is the facts and numbers you collect in an investigation. A **source** is where your information comes from — a person, a book, a website.

Where 3B fits in an investigation



Our questions and data come from Chapters 1 and 2:

needs and wants · tax · people who start businesses · work · advertising · prices

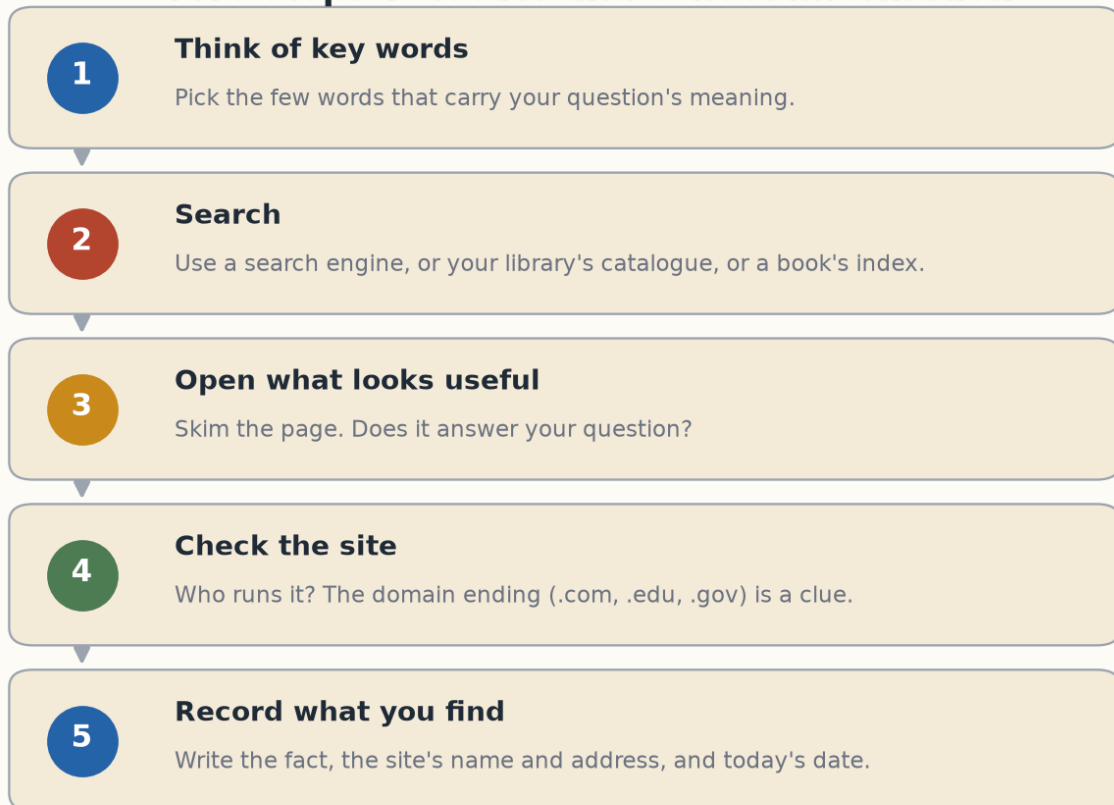
In 3B you gather the facts and sort them. Reading what they show is 3C.

Flow chart of the four steps of an investigation: ask, then locate-collect-and-organise highlighted, then make sense, then decide and share, with a strip listing the Chapter 1 and 2 topics the questions and data come from

In this book, our questions and data come from Chapters 1 and 2: needs and wants, tax, work, advertising and prices.

Step 1 — locate. Here are the five steps of a search.

Five steps to locate and collect information



Searching is a loop: if step 3 fails, go back and try different key words.

Five numbered step cards running down the page: think of key words; search; open what looks useful; check the site; record what you find, each with one line of explanation

A **search engine** is a website that finds other websites when you type words into it. A library **catalogue** is a list of everything a library holds, and you can search it by title or topic. An **index** is the little list of topics and page numbers at the back of many books. All three are ways to locate.

Key words. A search works best with **key words** — the few words that carry your question's meaning. Example 2 in the figure asks about the **GST** — the goods and services tax, the tax on most things you buy. (1B teaches the GST.)

Key words: few strong words beat a whole sentence

Example 1

Question: Where can I buy the cheapest school shoes?

Where can I buy the cheapest school shoes?

Too many words — the search engine gets lost.

Search: school shoes price

Just the naming words — strong and short.

Example 2

Question: How much GST do people pay when they buy things?

How much GST do people pay when they buy things?

Too many words — the search engine gets lost.

Search: GST Australia rate

Just the naming words — strong and short.

Tip: if the results are poor, swap one key word and search again.

Two example panels, each showing the same question typed into a search box as a whole sentence and marked “too many words”, then typed as two or three key words and marked “just the naming words”

Who runs the site? Every website has a **domain name** — the address you type to reach it. The end of a domain name is a clue to who runs the site. **Provenance** means where something comes from: the ending tells you a site’s provenance. It does not tell you whether the site’s information is true — checking that is 3D’s job.

Domain endings: a clue to who runs the site

.com a business sells things or makes money woolworths.com.au (a supermarket) real example	.edu education a school, TAFE or university deakin.edu.au (Deakin University) real example	.gov government a government department or service ato.gov.au (the Australian Taxation Office) real example
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In Australia the address usually has an extra .au at the end: .com.au, .edu.au, .gov.au.

The ending is a clue about who runs the site — not proof that its information is true.

Provenance means where something comes from. The domain ending tells you a site's provenance.

Three cards for the domain endings .com, .edu and .gov saying who runs each kind of site, each with a real Australian example address, plus a strip noting that Australian addresses add .au and that the ending is a clue, not proof

Step 2 — collect. When you collect a fact, write three things down with it: the fact, the source (the name and address of the place it came from), and the date you found it. Why the date? Because prices change. A price you wrote down last month may be wrong today.

Collecting advertising. Advertising can be collected too. A **tally** is a way of counting with strokes: four strokes, then a slash across them, makes five. The table below is a class **model** — one class's count for one day. Your class will collect its own numbers.

What types of advertising did we notice? (model data)

Type of advertising	Tally	Total
TV commercial breaks	<del> </del>	8
Online video ads	<del> </del>	5
Signs and billboards		3
Catalogues in the letterbox		2
Sponsor mentions during a show		1
Total ads noticed	19	

This is a class MODEL: Miss Chen's class counted ads for one day.

Your class will collect its own numbers — your tally table will look different.

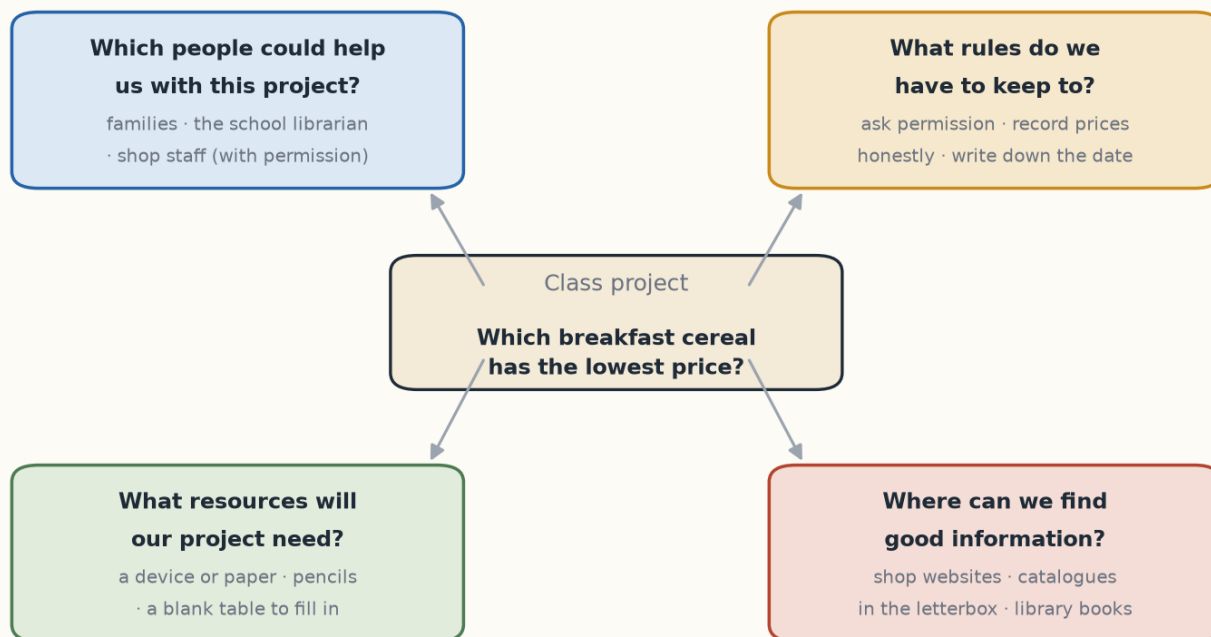
A tally table sorts the data while you collect it, one stroke at a time.

A tally table of five types of advertising with tally strokes and totals adding to nineteen ads noticed, labelled as model data

Step 3 — organise. A **table** sorts data into rows and columns. A **chart** shows the same data as a picture. Organised data is easy to read — and reading what data shows is 3C's job, which starts from your tidy table.

Planning a bigger job. Before you start a project, ask four guiding questions. Answering them first tells you what to locate and where to look.

Plan your project with four guiding questions



Answering these four questions first stops you getting lost once the project starts.

A centre card naming one class project, with arrows to four cards holding the guiding questions: which people could help us with this project, what rules do we have to keep to, what resources will our project need, and where can we find good information, each with example answers

Worked examples

Worked example 1 — one shop's cereal prices, collected and organised (with help)

Task: Collect the prices of two breakfast cereals from one shop's website, then organise them into a table.

Step 1 — locate. Type the key words *wheat biscuits* into the shop's search box on woolworths.com.au. Two useful results come back: the brand-name cereal and the shop's own brand.

Step 2 — collect. Write down each price, the pack size, and the price per 100 g shown beside it. Write the source and the date too: *Woolworths online store, 26 August 2026*.

Step 3 — organise. Put the facts into a table.

Two breakfast cereals at one shop — organised into a table

Product	Pack size	Price	Price per 100 g
Weet-Bix breakfast cereal	1.2 kg	\$7.00	\$0.58
Woolworths wheat biscuits	1.12 kg	\$5.60	\$0.50

The store-brand wheat biscuits cost less than the brand-name cereal — both in total price and per 100 g. The table makes that easy to see.

Source: Woolworths online store ([woolworths.com.au](https://www.woolworths.com.au)), product search results, collected 26 August 2026. Prices change over time, so always record the date.

A four-column table of two breakfast cereals at Woolworths with pack size, price and price per 100 g for each, with the source and collection date underneath

Source: Woolworths online store ([woolworths.com.au](https://www.woolworths.com.au)), product search results, collected 26 August 2026.

Step 4 — read it back. The table is organised, so two facts jump out at once: the shop’s own brand costs less in total (\$5.60 against \$7.00), and it costs less per 100 g too (50c against 58c). The extra “price per 100 g” column is doing real work: the packs are different sizes, so that column makes the match fair. Reading what organised data *shows* is 3C — here we stop at collecting and organising.

Worked example 2 — two shops’ shoe prices, from messy notes to a chart (with help)

Task: Collect the price of one kind of product — school shoes — from two different sellers, then organise the messy notes into a sorted table and a column chart.

Step 1 — collect. Two shops’ websites are searched with the key words *school shoes*. The notes come back messy, in the order they were found:

- Shoe Warehouse — Roc Metro — \$149.95
- Woolworths — Grosby Tanner lace-up — \$39.99
- Shoe Warehouse — Harrison Kasey — \$99.95
- Shoe Warehouse — Skechers Microstrides — \$79.95
- Shoe Warehouse — Koala Kelly — \$109.95
- Shoe Warehouse — Grosby Educate Snr 2 — \$89.95

Step 2 — organise into a sorted table. Sort the rows by price, cheapest first, and add a seller column.

School shoe prices from two shops — sorted cheapest first

Seller	Brand and model	Price
Woolworths	Grosby Tanner lace-up (boys)	\$39.99
Shoe Warehouse	Skechers Microstrides Recess Rules	\$79.95
Shoe Warehouse	Grosby Educate Snr 2	\$89.95
Shoe Warehouse	Harrison Kasey	\$99.95
Shoe Warehouse	Koala Kelly	\$109.95
Shoe Warehouse	Roc Metro	\$149.95

sorted:
cheapest
at the top

Sorting the rows turns a list of prices into an organised table.

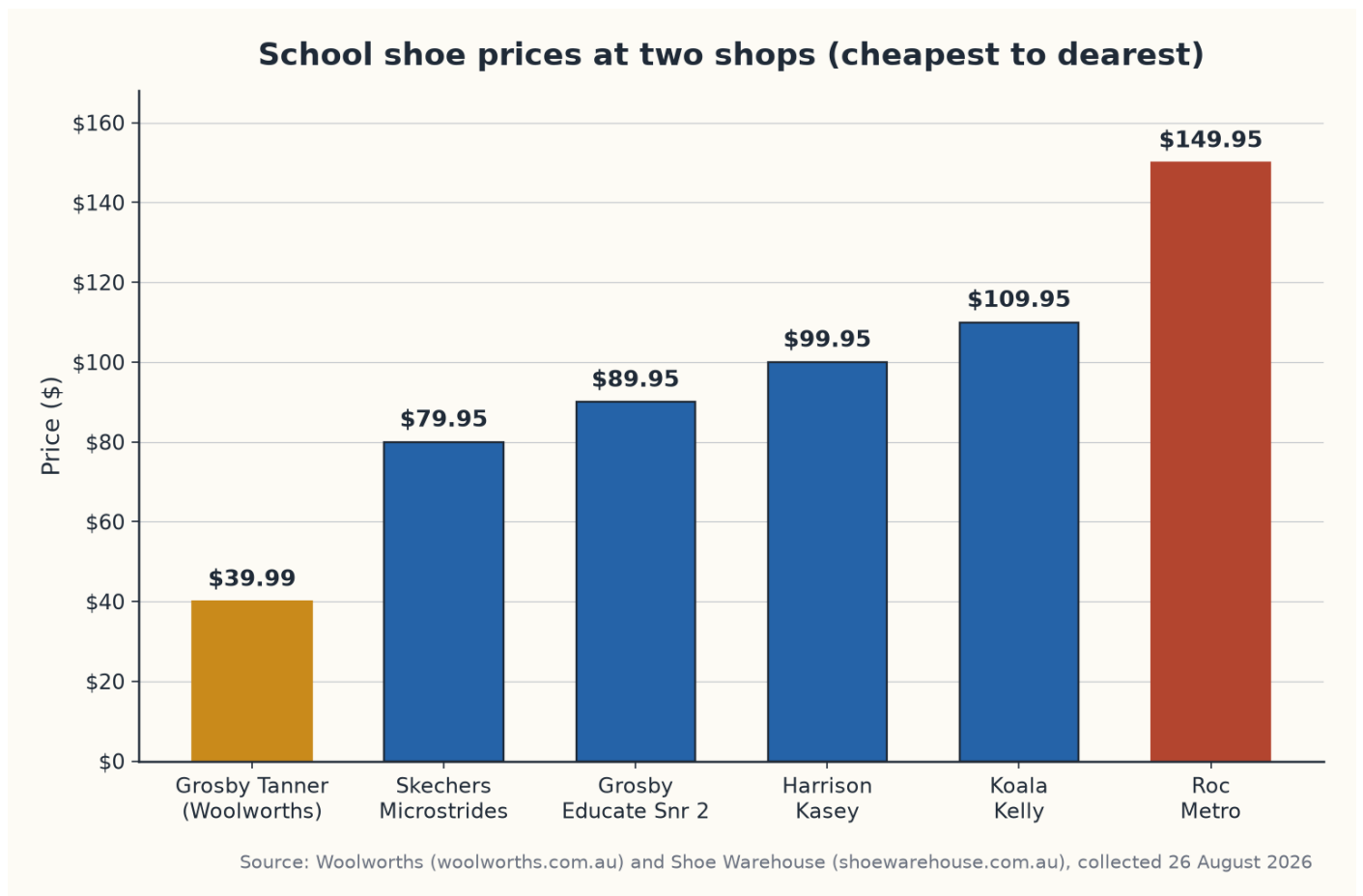
The cheapest shoes in this collection cost \$39.99; the dearest cost \$149.95.

Source: Woolworths online store (woolworths.com.au) and Shoe Warehouse (shoewarehouse.com.au), search results collected 26 August 2026. Product names shortened.

A three-column table of six school shoe prices from Woolworths and Shoe Warehouse sorted cheapest first, from \$39.99 to \$149.95, with the sources and collection date underneath

Source: Woolworths online store (woolworths.com.au) and Shoe Warehouse (shoewarehouse.com.au), search results collected 26 August 2026. Product names shortened from the shops' listings.

Step 3 — organise into a chart. The same data drawn as a column chart.



A column chart of the six school shoe prices from cheapest to dearest, with a labelled dollar scale on the side and the price written above each column

Step 4 — read it back. In the messy notes, the cheapest price took a hunt to find. In the sorted table and the chart, it is the first thing you see. That is what organising is for. (Drawing the lines of a chart and choosing its scale is your Mathematics Level 5 work — this section uses what you learn there.)

Your turn — with help

Q1. Look at the investigation map figure. (a) Which section teaches asking questions? (b) Which sections teach reading the data and checking where it came from? (c) Name two Chapter 1 and 2 topics your questions in this chapter could be about.

Q2. Look at the five search steps figure. (a) Which step names the library catalogue? (b) Which step says to write down the date? (c) A search brings back pages about shoes for racehorses. Which step do you go back to, and what do you change?

Q3. Pick key words for these questions. For each one, write the two or three words you would type, and say which word or words you left out and why. (a) What is the cheapest school shoe at Shoe Warehouse? (b) How much GST is added to things you buy in Australia? (c) What jobs do the adults in our class do?

Q4. Match each address to who most likely runs the site: (a) deakin.edu.au, (b) shoewarehouse.com.au, (c) ato.gov.au. (d) Which of the three would you open to find out what the GST is, and why? (e) What does the ending NOT tell you about a site?

Q5. Use the cereal table figure. (a) Which cereal costs less in total, and how much less? (b) Which cereal costs less per 100 g, and how much less? (c) The packs are different sizes. Which column makes the match fair, and why?

Q6. Use the advertising tally figure. (a) How many ads did the class notice in total? (b) How many more TV commercial breaks than online video ads were noticed? (c) Which type was noticed the least? (d) The figure is labelled “model data”. What does that mean for the numbers your class will get?

Q7. These four answers belong to a class planning the cereal price project. Write the guiding question (who / rules / resources / where) that each answer belongs to. (a) “Pencils, paper, and a blank table to fill in.” (b) “Our families can bring in cereal boxes, and the librarian can help us search.” (c) “Shop websites and the catalogues that come in the letterbox.” (d) “Ask permission first, write every price down exactly as you see it, and write the date.”

Your turn — on your own

Q8 — collect and organise real prices. Choose one product that at least two different sellers stock (a loaf of bread, a notebook, a football). With permission, find its price on two sellers’ websites or in two catalogues. Organise what you collect into a table with a column for the seller and a column for the price, sorted cheapest first. Under the table, write your source note: each seller’s name and address, and the date you collected the prices.

Q9 — run your own advertising survey. For one day, tally the advertising you notice, using the five types from the tally figure (add one more row if you notice a type we did not list). Organise your tallies into totals, then draw your data as a column chart by hand. Your Mathematics lessons this year teach you to draw the lines of a chart with a scale — use what you learn there.

Q10 — plan a project. Choose one project: (a) *What jobs do the adults in our class families do?* (links to 1D) (b) *Which breakfast cereal has the lowest price per 100 g?* (c) *What advertising reaches our class in one week?* Answer the four guiding questions for your project in a table of your own, the way the project questions figure does.

Q11 — reason it out. Mia says: “This website ends in .com and it looks smart, so the information on it must be true.” Do you agree? Use what a domain ending tells you — and what it does not tell you — to explain your answer. Which section of this book will teach Mia how to check the information itself?

Answers

Q1. (a) 3A. (b) 3C and 3D. (c) Any two of: needs and wants, tax, work, advertising, prices.

Q2. (a) Step 2. (b) Step 5. (c) Back to step 1: change the key words (add a word like *school* so the search finds school shoes, not racehorse shoes).

Q3. Models: (a) *school shoes Shoe Warehouse* — left out “what is the cheapest”, because those words do not name anything. (b) *GST Australia* — left out “how much is added to things you buy”. (c) *jobs adults class* — left out “what do the ... do”. Key words are the naming words; question words get left out.

Q4. (a) A university (education). (b) A business. (c) The government. (d) ato.gov.au — the Australian Taxation Office runs the tax system, and the .gov ending says a government department runs the site. (e) It does not tell you whether the information on the site is true.

Q5. (a) The shop’s own brand (Woolworths wheat biscuits), by \$1.40 (\$7.00 – \$5.60). (b) The wheat biscuits, by 8c per 100 g (58c – 50c). (c) The “price per 100 g” column — the packs are different sizes (1.2 kg and 1.12 kg), so the price per 100 g compares the same amount.

Q6. (a) 19. (b) 3 more (8 – 5). (c) Sponsor mentions during a show (1). (d) They are one class’s count for one day, not your numbers — your class collects its own tally, so your totals will be different.

Q7. (a) What resources will our project need? (b) Which people could help us with this project? (c) Where can we find good information? (d) What rules do we have to keep to?

Worked solutions

Q8 (model). Product: a 600 g loaf of white bread. Table, sorted: Seller A’s catalogue \$2.90; Seller B’s website \$3.50. Source note: “Seller A catalogue, letterbox, 12 August 2026; Seller B website (address written in full), 12 August 2026.” The table is organised when a reader can see the seller and the price for every row without asking you a single question.

Q9 (model). One student’s day: TV commercial breaks 6, online video ads 4, signs and billboards 2, catalogues in the letterbox 1, sponsor mentions 0 — total 13. The column chart has one column per type, the tallest column first or last (your choice), and a scale on the side that fits the biggest total.

Q10 (model), project (b). Who can help: families, the school librarian, shop staff with permission. Rules: ask permission before searching, record every price exactly as shown, write the date. Resources: a device or paper, pencils, a blank table. Where: shop websites, letterbox catalogues, library books with prices in them. A plan that answers all four questions is ready to start.

Q11 (model). Disagree. The .com ending tells you a business runs the site — that is its provenance. A business can run a smart-looking site and still be wrong, or want you to buy its product. The ending is a clue about *who*, not proof about *true*. To check the information itself — for example by matching it against another source — Mia needs 3D.

Sources for this section

- Woolworths online store (woolworths.com.au) — product search results: Weet-Bix breakfast cereal 1.2 kg (\$7.00, \$0.58 per 100 g); Woolworths wheat biscuits 1.12 kg (\$5.60, \$0.50 per 100 g); Grosby Tanner lace-up school shoes (\$39.99). Retrieved 26 August 2026. Raw captures kept with this section’s build files.
- Shoe Warehouse (shoewarehouse.com.au) — search results for “school shoes”: Skechers Microstrides \$79.95; Grosby Educate Snr 2 \$89.95; Harrison Kasey \$99.95; Koala Kelly \$109.95; Roc Metro \$149.95. Retrieved 26 August 2026. Raw capture kept with this section’s build files.

Reading graphs, tables and text to spot patterns and trends

Economics and Business · Levels 5 and 6 · Skills strand: Interpreting and analysing data and information ·

VC2HE6S03 · codes E01 E02 E03 E04 · builds on needs and wants, jobs, advertising and prices from Chapters 1 and 2

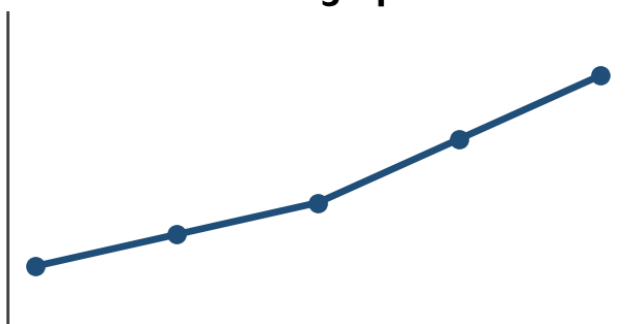
Theory

Data is facts and numbers we can learn from. A graph, chart or table is a **model** of something real — a picture of money spent, people at work or prices moving. When we look at data we search for a **pattern** (something that keeps happening) and a **trend** (the way the numbers are moving overall: going up, going down, staying about the same, or up and down).

Four shapes a trend can make

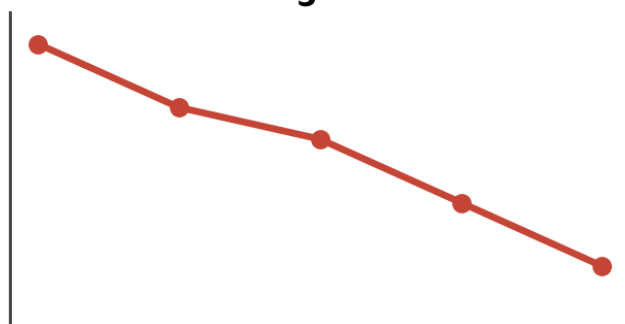
The numbers here are made up to show the shapes only.

Going up



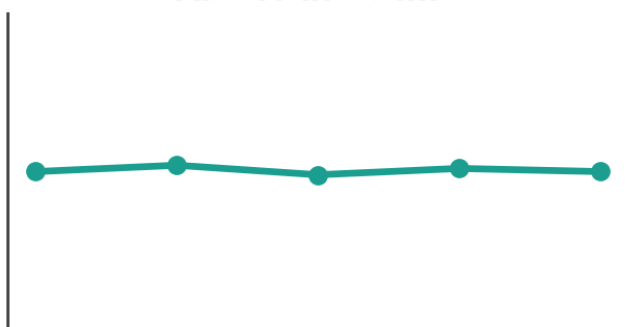
Each year is bigger than the one before.

Going down



Each year is smaller than the one before.

About the same



Not much change from year to year.

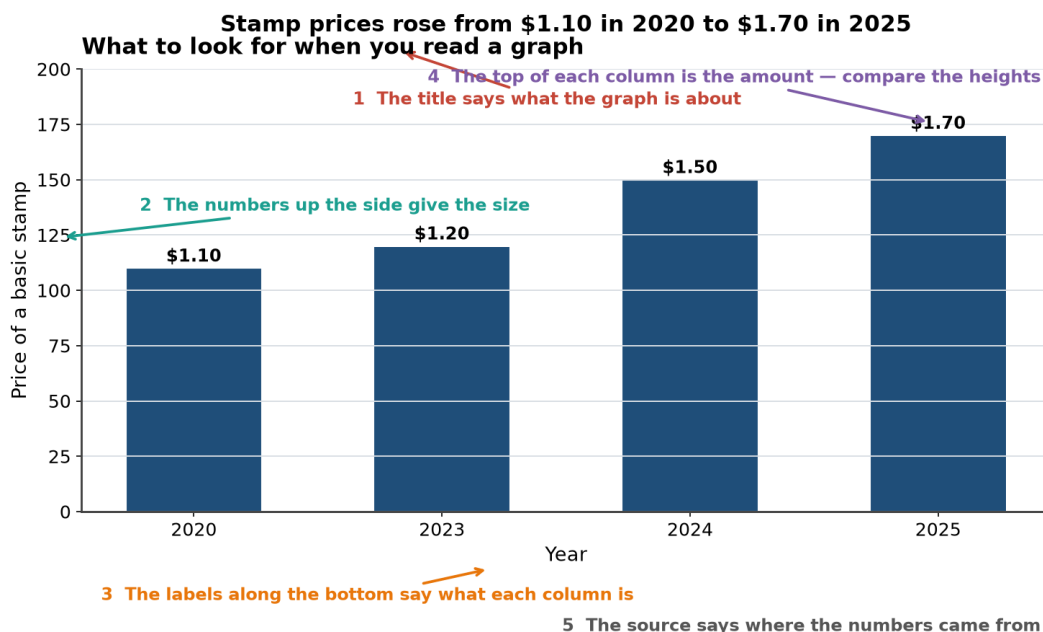
Up and down



It rises, then falls, then rises again.

Four small line graphs showing the four trend shapes: going up, going down, staying about the same, and up and down

Five checks when you read any graph (E02, E03). In maths this year you are learning to draw graphs yourself — in this section we read graphs that are already drawn.



Source: Australia Post basic letter stamp prices. Timing of changes from the ACCC Price Notifications Register (Australian Postal Corporation, reserved ordinary letter services). Retrieved 26 August 2026.

Column chart of Australia Post stamp prices from 2020 to 2025 with five reading checks labelled: the title, the numbers up the side, the labels along the bottom, the column tops, and the source

1. The **title** says what the graph is about.
2. The **numbers up the side** give the size being measured.
3. The **labels along the bottom** say what each column or point is.
4. The **tops of the columns or points** are the amounts — compare the heights.
5. The **source** says where the numbers came from, so they can be checked.

Reading a family's spending (E01). The Australian Bureau of Statistics (ABS) asks households — homes and the people in them — what they buy. The table and pie chart below show the answers. The pattern tells us what an average family needs most (like housing and food, from Chapter 1) and what it likes to spend on once needs are covered (like recreation — sport, hobbies and fun).

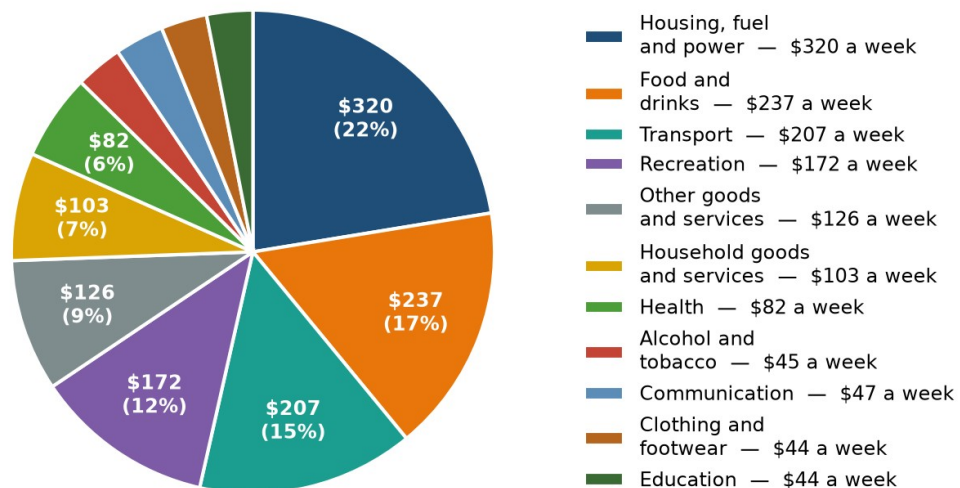
Average weekly household spending, Australia, 2015-16

Spending category	Amount per week
Current housing costs (selected dwelling)	\$279
Domestic fuel and power	\$41
Food and non-alcoholic beverages	\$237
Alcoholic beverages	\$32
Tobacco products	\$13
Clothing and footwear	\$44
Household furnishings and equipment	\$58
Household services and operation	\$45
Medical care and health expenses	\$82
Transport	\$207
Communication	\$47
Recreation	\$172
Education	\$44
Personal care	\$29
Miscellaneous goods and services	\$97
TOTAL	\$1,425

Source: Australian Bureau of Statistics, Household Expenditure Survey, Australia: Summary of Results, 2015-16 (cat. no. 6530.0). Retrieved 26 August 2026.

Table of average weekly household spending in Australia in 2015-16, from housing at \$279 down to tobacco products at \$13, totalling \$1,425 a week

What an average Australian household spent each week, 2015-16



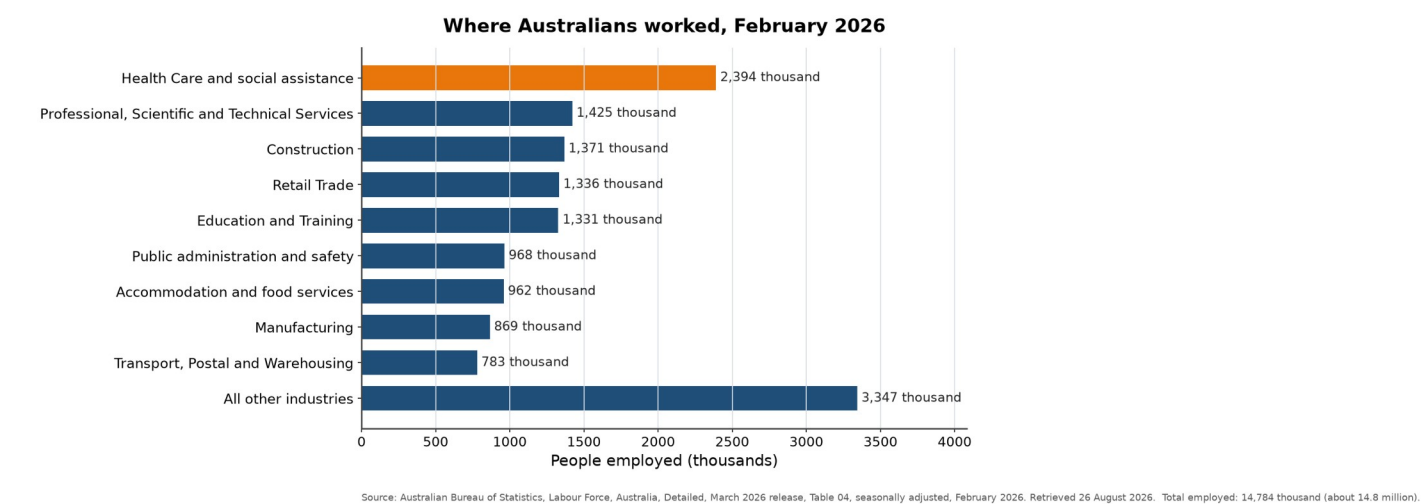
Source: Australian Bureau of Statistics, Household Expenditure Survey, Australia: Summary of Results, 2015-16 (cat. no. 6530.0). Retrieved 26 August 2026.

Amounts are the average across all Australian households; parts may not add exactly to the published total of \$1,425 because of rounding.

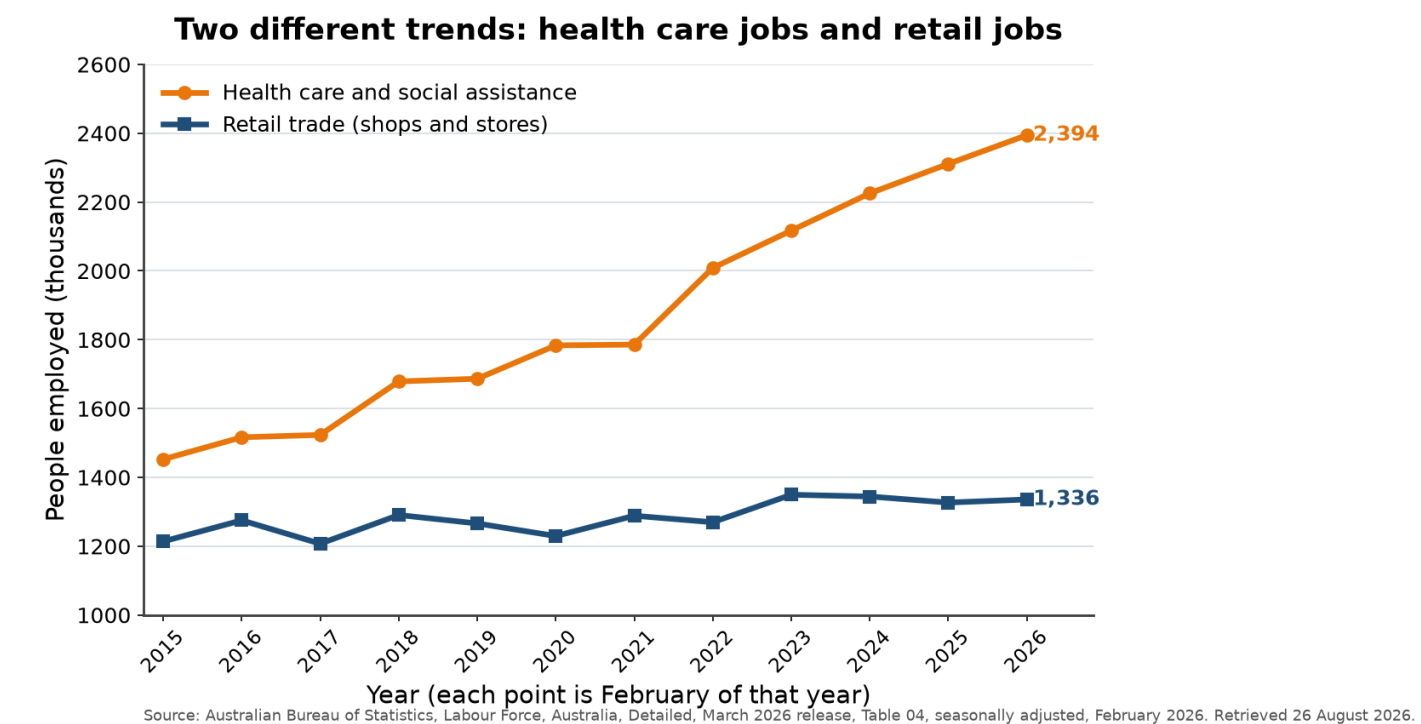
Pie chart of what an average Australian household spent each week in 2015-16, with housing, fuel and power the biggest share at \$320 a week

Source: Australian Bureau of Statistics, Household Expenditure Survey, 2015-16. Retrieved 26 August 2026.

Reading jobs data (E01, E02). The ABS also counts people at work. The bar chart shows the biggest industries — groups of businesses doing the same kind of work — in February 2026. The line graph follows two of them for eleven years. The trend is a clue to the skills and training workers will need: growing industries need more workers.



Bar chart of where Australians worked in February 2026, with health care the biggest industry at 2,394 thousand people

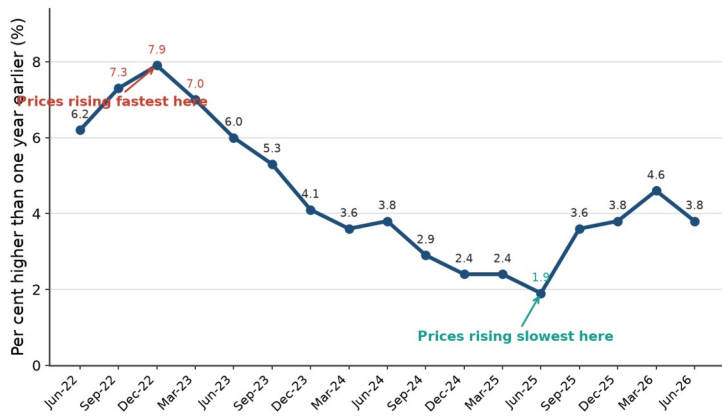


Line graph of health care jobs rising from 1,450 thousand in 2015 to 2,394 thousand in 2026 while retail jobs stayed near 1,300 thousand

Source: Australian Bureau of Statistics, Labour Force, Australia, Detailed, Table 04, February 2026. Retrieved 26 August 2026.

Reading price rises over time (E03). Prices move too. The line graph shows how fast prices were rising each quarter (three months), and the column chart shows one famous price — the stamp on a basic letter.

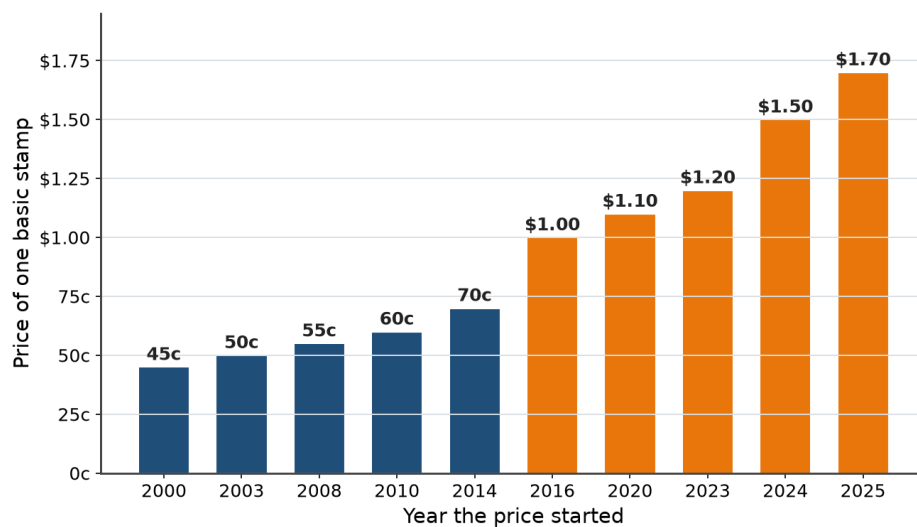
How fast prices were rising in Australia, year to each quarter



Source: Australian Bureau of Statistics, Consumer Price Index, Australia, June 2026 quarter (released 29 July 2026). Retrieved 26 August 2026. Each point is the Consumer Price Index (CPI), all groups, eight-capital-city average, over the 12 months to that quarter.

Line graph of how fast Australian prices were rising, year to each quarter, from June 2022 to June 2026, peaking at 7.9 per cent in December 2022

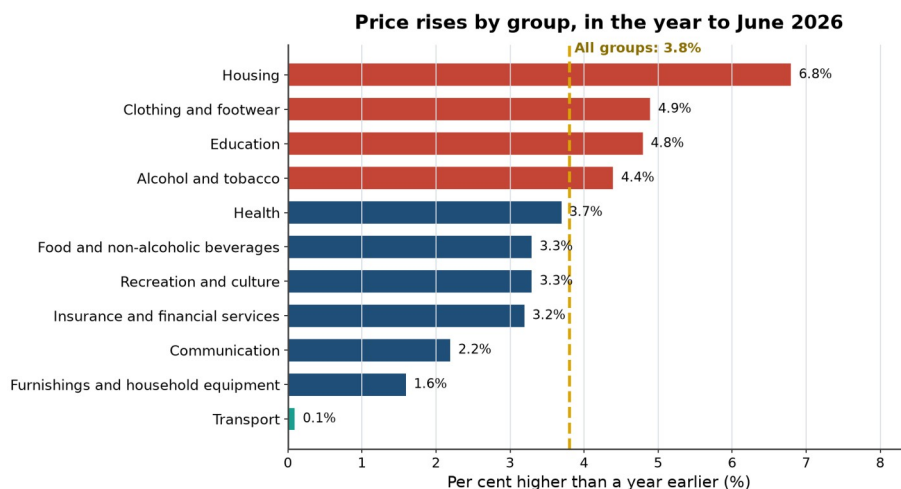
The price of sending a letter: Australia Post basic stamp



Source: Australia Post basic letter stamp prices. Timing of changes from the ACCC Price Notifications Register (Australian Postal Corporation, reserved ordinary letter services). Retrieved 26 August 2026.

Column chart of the Australia Post basic stamp price rising from 45 cents in 2000 to \$1.70 in 2025

The bar chart below breaks the June 2026 price rise down by group, with the 3.8 per cent all-groups rise marked as a dashed line.



Source: Australian Bureau of Statistics, Consumer Price Index, Australia, June 2026 quarter (released 29 July 2026). Retrieved 26 August 2026. Electricity, which sits inside the housing group, was up 22.4% over the same year.

Bar chart of price rises by group in the year to June 2026, from housing at 6.8 per cent down to transport at 0.1 per cent, with the 3.8 per cent all-groups line marked

Source: Australian Bureau of Statistics, Consumer Price Index, Australia, June 2026 quarter. Retrieved 26 August 2026. Stamp prices: Australia Post, with timing from the ACCC Price Notifications Register. Retrieved 26 August 2026.

Reading data in a text (the “text” part of this skill). Data is not only in graphs — writing is full of it. Train your eyes on the numbers first.

A text full of data — the orange numbers are the ones to read first

Spending in Australian households

The Australian Bureau of Statistics (ABS) asks households what they buy.

In its 2015-16 survey, the average household spent about **\$1,425** each week on goods and services. The biggest share went to housing, fuel and power — **\$320** a week. Food and drinks came next at **\$237** a week, and transport cost **\$207** a week. Education was one of the smallest shares, at **\$44** a week.

Prices keep moving too: in the year to June 2026, prices overall were **3.8%** higher than a year earlier. Housing prices rose fastest, up **6.8%**.

Source: Australian Bureau of Statistics, Household Expenditure Survey, Australia: Summary of Results, 2015-16 (cat. no. 6530.0). Retrieved 26 August 2026.

Source: Australian Bureau of Statistics, Consumer Price Index, Australia, June 2026 quarter (released 29 July 2026). Retrieved 26 August 2026.

Short information text about household spending and price rises with the key numbers picked out in orange

Surveying local businesses (E04). A **survey** is a short set of questions asked to the same people (or businesses). With a partner and your teacher’s okay, ask five businesses near your school how they tell people about what they sell. Tick every method they use, total each column, then draw your results as columns and write what you conclude about which methods suit which businesses and customers.

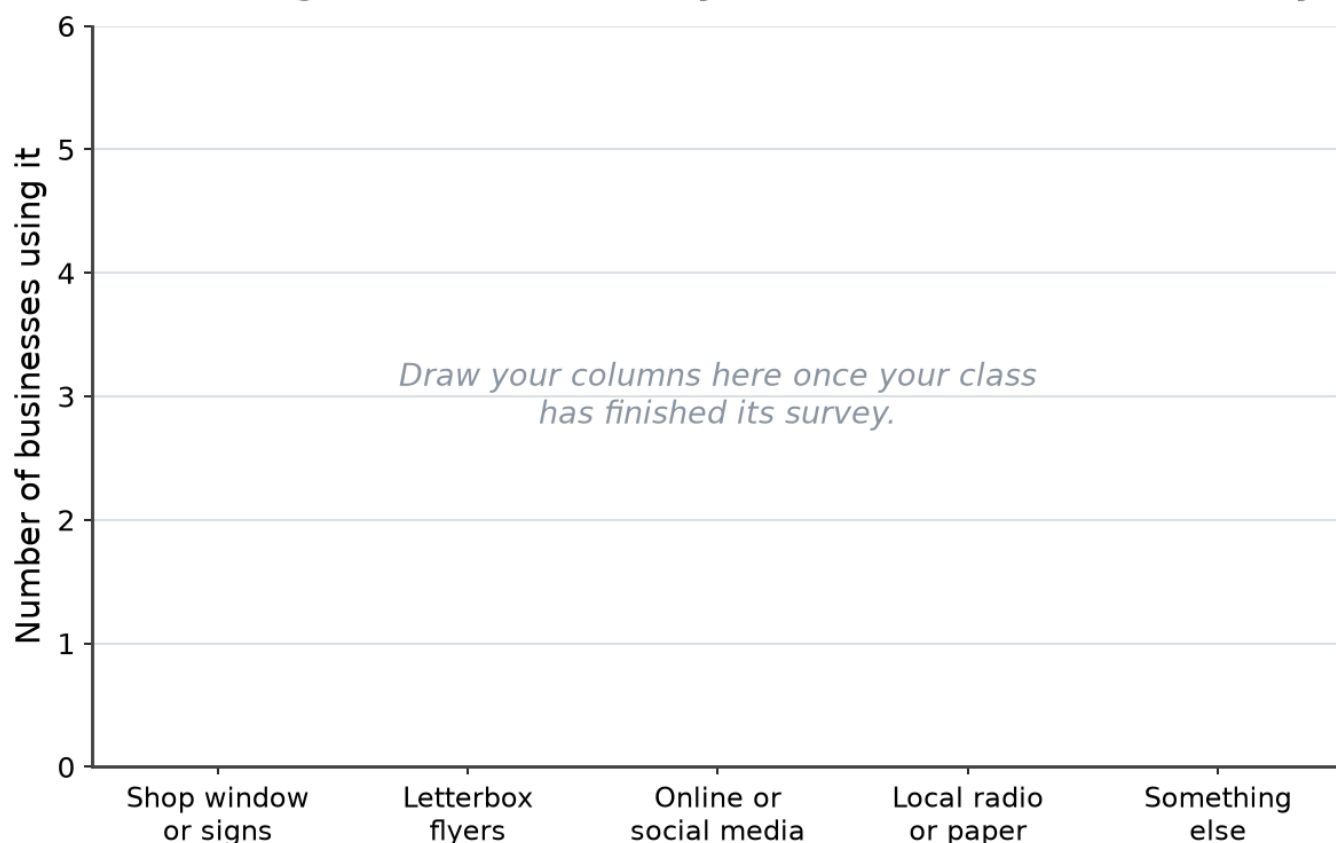
Advertising survey — businesses near our school

Business name and type	Shop window or signs	Letterbox flyers	Online or social media	Local radio or paper	Something else
Business 1:					
Business 2:					
Business 3:					
Business 4:					
Business 5:					
TOTAL					

Ask each business: How do you tell people about what you sell? Put a tick in every method they use. Then total each column. Remember to ask before you write anything down, and thank each business for its time.

Blank advertising survey sheet with five businesses down the side and five advertising methods across the top, to tick and total

Advertising methods used by the businesses we surveyed



Template only — the columns are blank until your class collects its own data.

Blank column chart template for drawing the class advertising survey results

Worked examples

Example 1 — Reading a line graph of price rises (with help · E03)

Use the line graph of price rises above.

Working	Comment
Read the title.	Each point says how much higher prices were than a year earlier.
Find the highest point.	Dec-22, at 7.9 — prices were rising fastest then.
Find the lowest point.	Jun-25, at 1.9 — rising slowest then.
Read the last point.	Jun-26, at 3.8 — prices were still rising, just slower than at the peak.
Say the trend in one sentence.	Prices rose fast to Dec-22, then the rises got smaller until Jun-25, and now they are getting a little bigger again — an up-and-down shape.

Example 2 — What a family's spending shows about needs and wants (with help · E01)

Use the spending table and pie chart above.

Working	Comment
Biggest share: housing, fuel and power, \$320 a week.	A need — a family must have a home, warmth and power.
Next: food and drinks \$237, transport \$207.	Needs too — food to eat and a way to get to work and school.
Fourth: recreation, \$172.	Wants — the pattern shows this family spends on fun after needs are covered.
Small share: education, \$44.	Every family's pattern is a little different; this is the average of all Australian households.

Practice questions

Practice with help

Q1. Match each story to a trend shape in the four-shapes figure: going up, going down, about the same, or up and down. (a) Your pocket money rises \$1 on each birthday. (b) Ice-cream sales each month from January to June. (c) The canteen sells about the same number of lunches every week. (d) Umbrella sales across the four seasons.

Q2. Use the stamp column chart and the five checks. (a) What is the title? (b) What do the numbers up the side measure? (c) What do the labels along the bottom say? (d) Where did the numbers come from?

Q3. Use the spending pie chart. (a) Name the two biggest shares. (b) Add them: how much is that each week? (c) Are those two shares needs or wants?

Q4. Use the jobs bar chart. (a) Which industry employed the most people? (b) How many thousand more people worked in health care than in retail trade? (c) About how many million people were employed in total?

Q5. Use the jobs line graph. Describe the health care line and the retail trade line, each in one sentence using a trend shape.

Q6. Use the stamp column chart. (a) What was the stamp price in 2008? (b) How much did the price rise from 2016 to 2020? (c) What is the trend across all the years?

Practice on your own

Q7. Use the line graph of price rises. (a) When were prices rising fastest, and how fast? (b) When were they rising slowest, and how slow? (c) How fast were they rising in the June 2026 quarter? (d) Write the trend in one sentence.

Q8. Use the bar chart of price rises by group (year to June 2026). (a) Which group rose fastest? (b) Which rose slowest? (c) Name two groups that rose faster than the 3.8 per cent all-groups line. (d) Which was closer to the all-groups rise: health at 3.7 per cent, or food at 3.3 per cent?

Q9. Read only the orange-number text. (a) How much did the average household spend each week in 2015-16? (b) What was the biggest share, and how much was it? (c) Housing prices rose 6.8 per cent. How much bigger is that rise than the 3.8 per cent overall rise? (d) Why look at the numbers first when a text is full of data?

Q10. Carry out the local business advertising survey (E04). Fill in the survey sheet, total each column, draw your results on the blank column chart, and write two conclusions linking the methods you found to the types of businesses and customers near your school.

Q11. Reasoning and decision. One class (made-up example results) found: shop window or signs 3, letterbox flyers 2, online or social media 4, local radio or paper 1. A friend is opening a small cake shop on the street near your school. Choose the two advertising methods you would recommend. Give a reason for each, using the class data and what you know about the shop's likely customers.

Answers

Q1. (a) going up (b) going down (c) about the same (d) up and down.

Q2. (a) “The price of sending a letter: Australia Post basic stamp.” (b) The price of one basic stamp. (c) The year each price started. (d) Australia Post, with the timing of changes from the ACCC Price Notifications Register; retrieved 26 August 2026.

Q3. (a) Housing, fuel and power (\$320) and food and drinks (\$237). (b) \$557 a week. (c) Needs.

Q4. (a) Health Care and Social Assistance. (b) $2,394 - 1,336 = 1,058$ thousand — a little over a million more people. (c) About 14.8 million (14,784 thousand).

Q5. Health care: going up, strongly. Retail trade: about the same overall (small ups and downs but no big change).

Q6. (a) 55c. (b) 10c (\$1.00 to \$1.10). (c) Going up — every change is a rise.

Q7. (a) Dec-22, 7.9 per cent. (b) Jun-25, 1.9 per cent. (c) 3.8 per cent. (d) Example: prices rose fastest in 2022, then rises slowed until mid-2025, and are now creeping up again.

Q8. (a) Housing, 6.8 per cent. (b) Transport, 0.1 per cent. (c) Any two of: clothing and footwear 4.9, education 4.8, alcohol and tobacco 4.4. (d) Health (3.7 is nearer 3.8 than 3.3 is).

Q9. (a) About \$1,425. (b) Housing, fuel and power, \$320 a week. (c) 3.0 per cent bigger ($6.8 - 3.8 = 3.0$). (d) The numbers are the data — everything else in the sentence is about them.

Q10. Answers vary. A conclusion links a method to a business type and its customers, e.g. “The coffee shop uses its shop window and social media because most of its customers walk past or live nearby.”

Q11. Answers vary. Example: shop window or signs (3 of 5 local businesses use it, and people walk past the street every day) plus online or social media (the most-used method in the data, and families nearby are online).

Fully-worked solutions

Q7. (a) Highest point on the line: Dec-22, labelled 7.9 → prices rising fastest at 7.9 per cent. (b) Lowest point: Jun-25, labelled 1.9 → slowest at 1.9 per cent. (c) Last point: Jun-26, 3.8 per cent. (d) From (a)–(c): the line goes up to a peak, comes down, and turns up a little at the end → “Prices rose fast to December 2022, rises then slowed until June 2025, and are now getting a little faster again.”

Q8. (a) Longest bar: housing, 6.8%. (b) Shortest bar: transport, 0.1%. (c) Bars longer than the dashed 3.8 line: housing 6.8, clothing and footwear 4.9, education 4.8, alcohol and tobacco 4.4 — any two. (d) Distance from 3.8: health $3.8 - 3.7 = 0.1$; food $3.8 - 3.3 = 0.5$ → health is closer.

Q9. (a) First orange number: \$1,425 a week. (b) Biggest share named: housing, fuel and power at \$320 a week. (c) $6.8 - 3.8 = 3.0$, so the housing rise is 3.0 per cent bigger. (d) In a data text, the numbers carry the facts; reading them first tells you what the text is really saying before the words dress it up.

Q10. Step 1, ask five businesses the one question and tick the sheet. Step 2, total each column (e.g. window 4, flyers 1, online 3, radio 0, other 1). Step 3, draw one column per total on the blank chart, using the numbers up the side. Step 4, write two conclusions that each name a method, a business type and a customer link, e.g. “Shops on the main street all use window signs because strangers walk past; the takeaway uses letterbox flyers because its customers live close by.”

Q11. Step 1, read the class data: online 4, window 3, flyers 2, radio 1. Step 2, think about the cake shop: it sits on a busy street, and its customers are local families. Step 3, decide: (i) shop window or signs — the street gives free eyeballs every day, and 3 of 5 nearby businesses already use it; (ii) online or social media — the most-used method in the class data, good for photos of cakes and for local families scrolling nearby. Step 4, check: both choices are backed by the data and matched to the customers — that is what a conclusion from a survey should do.

Checking where information comes from

Economics and Business 5 · Chapter 3 — Investigating: asking, gathering and making sense of data · Section 3D

Owns

VC2HE6S04

Draws on

VC2HE6S04.E01 VC2HE6S04.E02 (VCAA's examples for teachers, listed here for links — D7)

What the two VCAA examples ask for, in plain words: **E01** — look at different kinds of data and information in economics and business, and work out where each number came from — using footnotes, website names and headings — then check it again to make sure it is real and true; **E02** — make checking the source of every number and fact you use a routine habit.

Before we start — the words this section uses

Word	How this section uses it
data	numbers and facts you have found out — prices, counts, survey answers
information	what data tells you once you have put it in order and read it
source	where something comes from. The source of data is <i>who</i> collected it and <i>where</i> it is written down
footnote	a small line of writing under a table or picture that says where it came from
cross-check	to check a fact a second time, in a second place
verify	to check that something is true. You will also see “verify authenticity” in this section — it means check that the data is real and true

These words are the tools for the whole section. In Chapters 1 and 2 you met needs and wants, tax, jobs, advertising and prices. In Sections 3A to 3C you asked questions, collected data and read graphs and tables. Now you add the last guard on all of that work: before you believe a number, ask **where did it come from?**

1. Where did that number come from?

Last week Mia's mum bought a big 1.2 kg box of Weet-Bix at Woolworths and paid \$7.00. This week Mia's friend says, “It's only \$4.00!” Who is right?

The strange answer is: maybe both. A price can be true for one box size, one shop and one day, and not true for another. The number \$7.00, written on its own, cannot tell you where it came from. A number only becomes trustworthy data when someone writes down its story: who wrote it down, where, and when. That story is the **source**.

Keep this idea safe: a number on its own cannot tell you if it is true. A number with a source can.

That is why every table, graph and claim in this book tells you its source — and why, from now on, every table, graph and claim *you* use should too.

2. Three places a source shows itself

Where do you look for a source? Three places cover most of what you will meet.

The heading — the big words above the data. A good heading says what the data is about, and very often who made it.

The footnote — the small line under a table or graph. It often starts with the word “Source:” and names the place the data came from.

The website line — the address at the top of a web page. It tells you who runs the page.

Weet-Bix prices at Woolworths	
Box size	Price
375 g	\$4.00
575 g	\$5.00
1.2 kg	\$7.00

Source: woolworths.com.au, viewed 26 August 2026

woolworths.com.au

HEADING
says what the data is about

FOOTNOTE
says where the data came from

WEBSITE LINE
says who runs the page

A data card titled ‘Weet-Bix prices at Woolworths’ with three box sizes and prices. Red arrows point to three parts of the card: the heading, which says what the data is about; the footnote, which says where the data came from; and the website line, which says who runs the page.

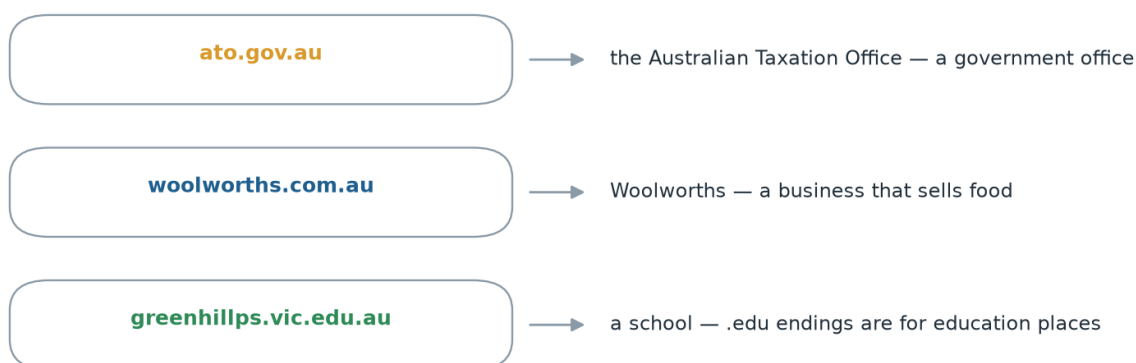
Figure 1. The three clues on a data card: heading, footnote and website line. The prices are real — from woolworths.com.au, viewed 26 August 2026.

The website line needs one more trick. An address has a name and an ending, and both give clues.

Reading a web address



Three more addresses — who runs them?



A web address bar showing the address `abs.gov.au` with two labelled parts: 'abs', the site's name, the Australian Bureau of Statistics; and '.gov.au', the ending, which tells you it is an Australian government site. Below are three more addresses: `ato.gov.au` (the Australian Taxation Office), `woolworths.com.au` (Woolworths, a business) and `greenhillps.vic.edu.au` (a school).

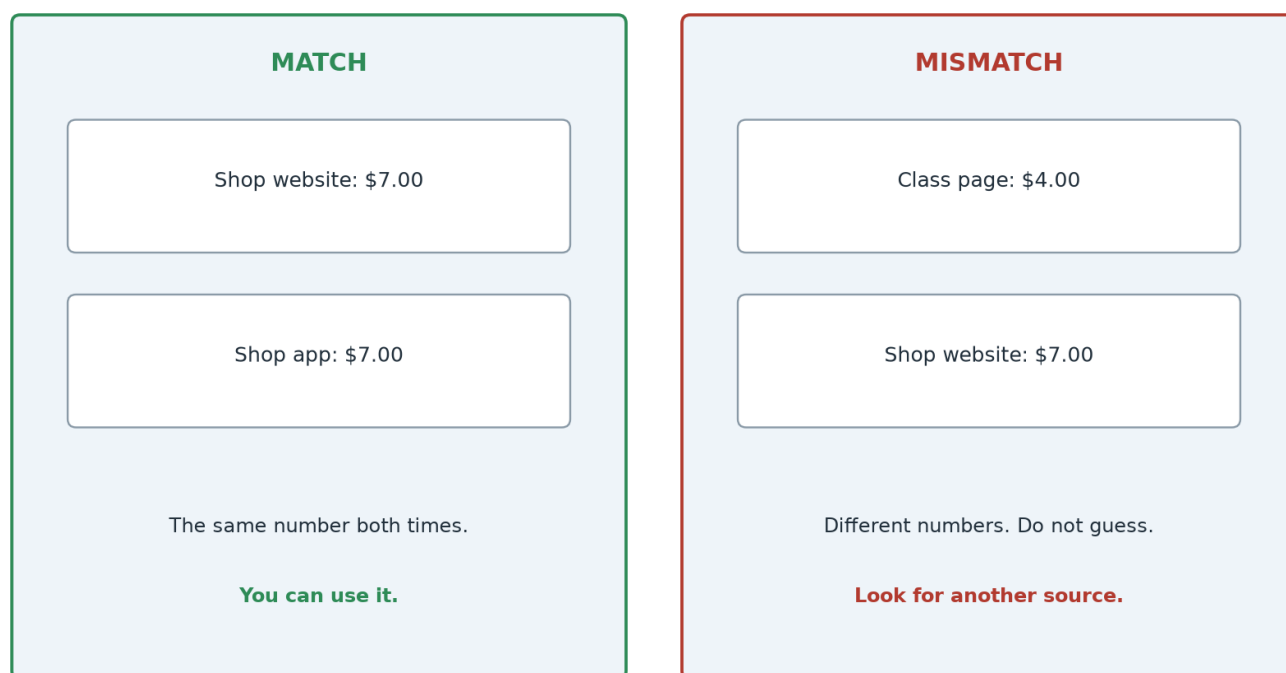
Figure 2. Reading a web address: the name part says who the site is, and the ending says what kind of place runs it.

So .gov.au endings belong to Australian government offices, .com.au and .com endings usually belong to businesses, and .edu endings belong to education places like schools. The ending is a clue about who is talking — not proof they are right. A shop's website is a fine source for the shop's own prices. It is not a fair source for "which shop is cheapest", because a shop wants you to shop there. Ask *who runs the page, and what do they want?*

3. Cross-checking — checking twice

Finding a source tells you where a number came from. **Cross-checking** tells you whether to trust it: look for the same number in a second place.

Cross-checking: does a second source say the same thing?



Two panels. The MATCH panel shows a shop website saying \$7.00 and the shop's app saying \$7.00, with the note 'The same number both times. You can use it.' The MISMATCH panel shows a class page saying \$4.00 and a shop website saying \$7.00, with the note 'Different numbers. Do not guess. Look for another source.'

Figure 3. Cross-checking: when two sources match, the number is safer to use. When they do not match, you do not pick the one you like — you keep checking.

Three rules for a mismatch:

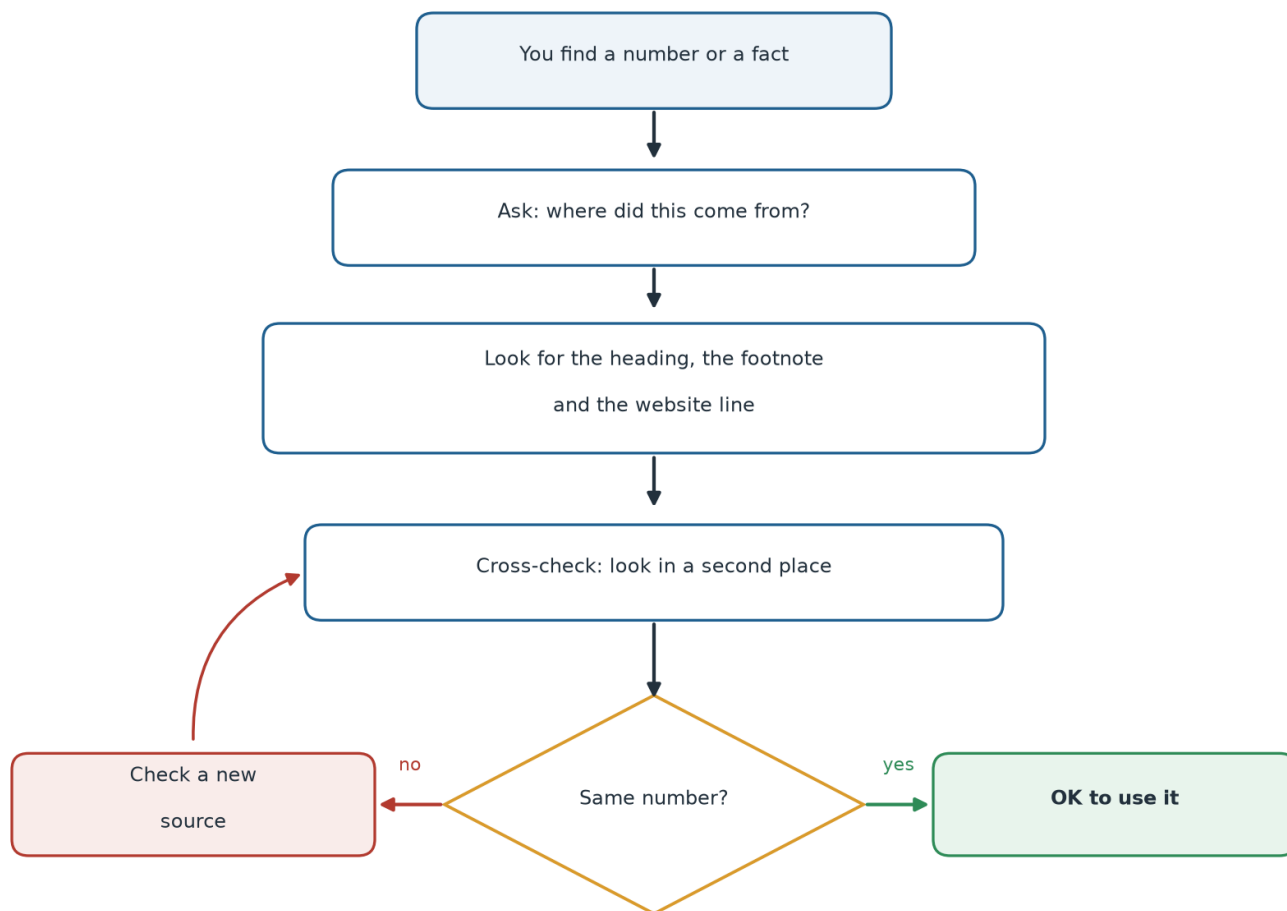
1. **Do not pick the number you like.** Liking is not checking.
2. **Look at the dates.** A price from last year and a price from today can both be honest and still disagree.
3. **Find another source.** A third place often settles it — and the best third source is the one with nothing to gain.

Keep this idea safe: two sources that disagree are not a fail. They are the data telling you to keep checking.

4. The source-detective habit

You count your change at the shop every time, not just sometimes. Source-checking is the same kind of habit: **every** time you use a number or a fact in economics and business, check its source. That is the habit this section builds (VC2HE6S04.E02).

The source-checking habit



A flowchart of the source-checking habit: 'You find a number or a fact' leads to 'Ask: where did this come from?', then 'Look for the heading, the footnote and the website line', then 'Cross-check: look in a second place'. A decision diamond asks 'Same number?' — yes leads to 'OK to use it'; no leads to 'Check a new source', which loops back to the cross-check step.

Figure 4. The habit as a loop: find, ask, look, cross-check — and if sources disagree, go around again.

Here is the habit as a card you can keep:

Source-detective checklist

☐ WHO collected this data?

☐ WHEN was it collected?

☐ WHERE is the source written? (heading, footnote, website)

☐ Does a second source say the SAME thing?

Use it every time you use a number.

A checklist card titled 'Source-detective checklist' with four boxes to tick: *WHO* collected this data? *WHEN* was it collected? *WHERE* is the source written? (heading, footnote, website) Does a second source say the *SAME* thing? At the bottom: 'Use it every time you use a number.'

Figure 5. The source-detective checklist — the four questions to ask of every number you use.

The whole picture

- **Data has a story.** Who collected it, where it is written, and when — that story is its source.
- **Three clues.** The heading, the footnote and the website line are the first places to look.
- **Check twice.** Cross-check with a second source. Match: safer to use. Mismatch: keep checking, never guess.
- **Every time.** Source-checking is a habit, like counting your change.

Worked examples

Example 1 — with help

Here is real data from the ABS — the Australian Bureau of Statistics, the government office that counts things for Australia. It comes from the 2021 Census, the big national count of homes and people.

Place	Typical weekly household income, 2021 Census
Australia	\$1,746
New South Wales	\$1,829

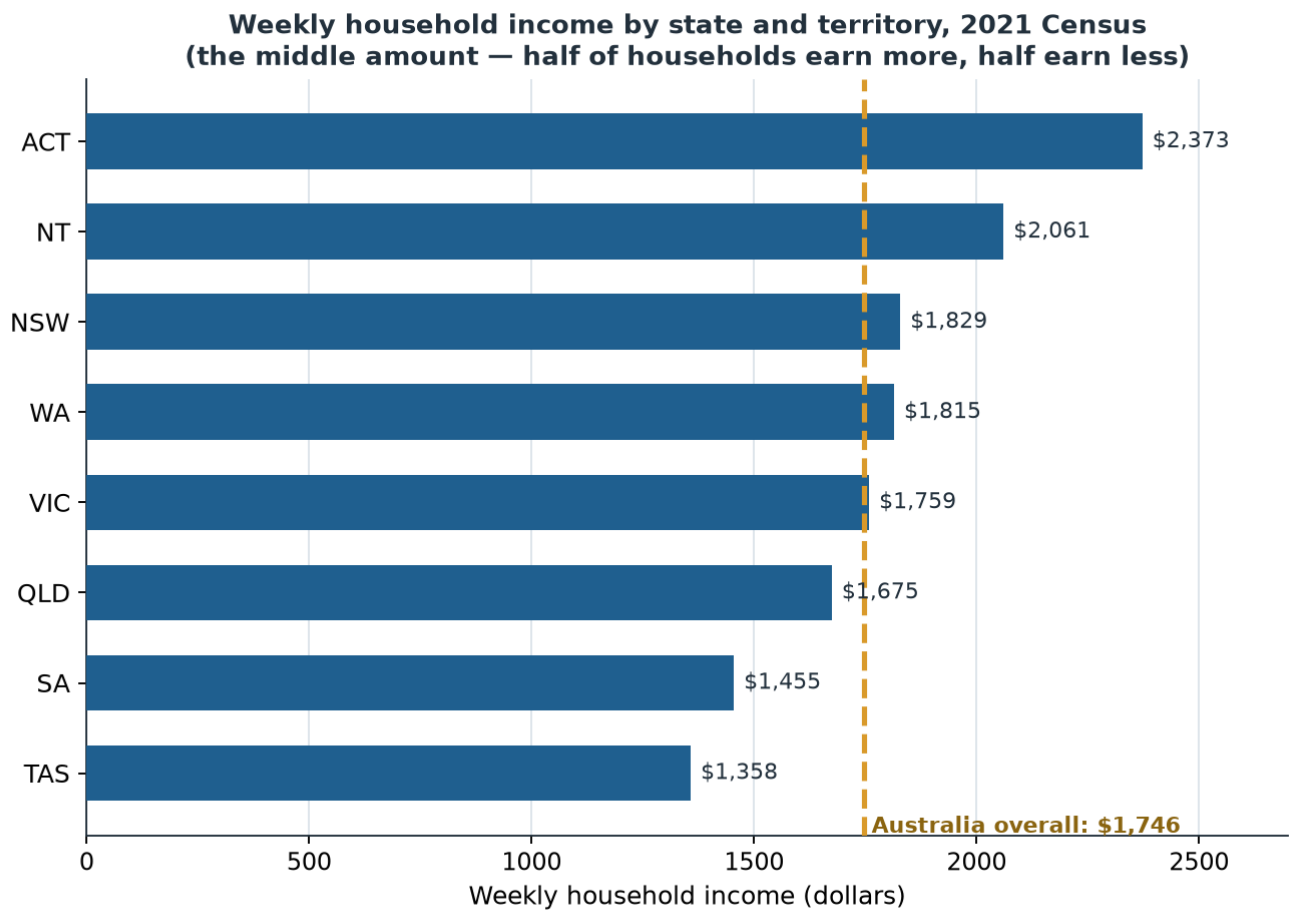
Place	Typical weekly household income, 2021 Census
Victoria	\$1,759
Queensland	\$1,675
South Australia	\$1,455
Western Australia	\$1,815
Tasmania	\$1,358
Northern Territory	\$2,061
Australian Capital Territory	\$2,373

Source: Australian Bureau of Statistics (ABS), 2021 Census QuickStats, abs.gov.au, viewed 26 August 2026. Each number is the middle amount — half of households in that place earn more, and half earn less.

Work through the source questions.

Step	What you find
Read the heading.	The data is about weekly household income in each state and territory, from the 2021 Census.
Read the footnote.	It starts with “Source:” and names the ABS, the 2021 Census QuickStats, the website abs.gov.au , and the date it was viewed — 26 August 2026.
Name the website.	abs.gov.au — the .gov.au ending says an Australian government office runs it, and the footnote names which one.
Cross-check.	Open abs.gov.au and look at the 2021 Census QuickStats page for one place, say Victoria. The page shows \$1,759 — the same number. Match. The data is safer to use.

The same data can also be drawn as a graph. A graph needs its source line too:



Source: Australian Bureau of Statistics (ABS), 2021 Census QuickStats, abs.gov.au, viewed 26 August 2026.

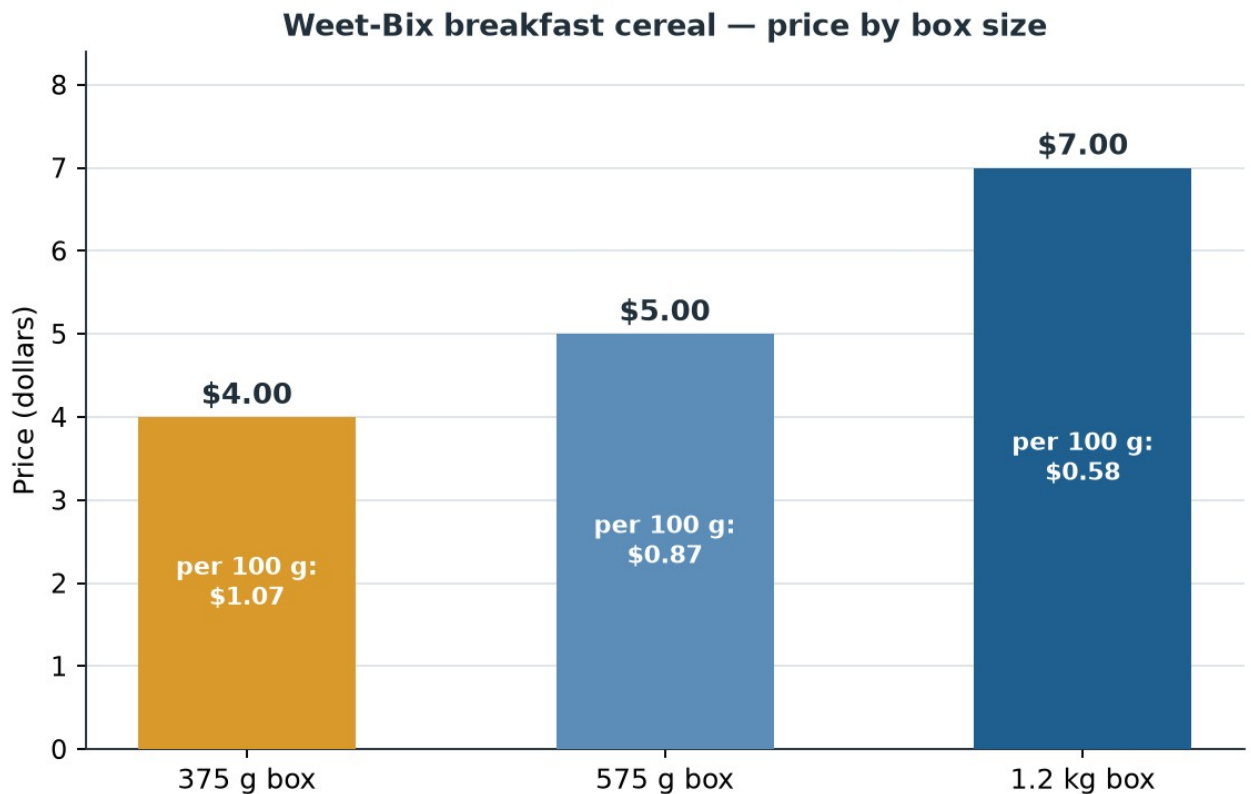
Horizontal bar chart of weekly household income by state and territory, 2021 Census: ACT \$2,373, NT \$2,061, NSW \$1,829, WA \$1,815, VIC \$1,759, QLD \$1,675, SA \$1,455, TAS \$1,358, with a dashed line at Australia overall \$1,746. The footnote names the source as the ABS 2021 Census QuickStats, abs.gov.au, viewed 26 August 2026.

Figure 6. The income data as a graph. The footnote under the graph does the same job as the footnote under the table: it tells you the source.

Example 2 — with help

Your class page says: “A 1.2 kg box of Weet-Bix costs \$4.00.” The class page has no date and does not name a shop. The Woolworths website says the 1.2 kg box is \$7.00, and the page was viewed on 26 August 2026.

Step	What you find
Ask where each number came from.	The shop’s own website says \$7.00 — the shop writes its own prices, so it can be checked. The class page says \$4.00, but the class page does not say where its number came from.
Cross-check.	The two sources disagree: \$4.00 against \$7.00. Do not guess. Look at the shop’s app or another shop’s website, and look at the dates.
Read the graph.	The shop’s own numbers for the same cereal, in three box sizes:



Source: woolworths.com.au, viewed 26 August 2026. Prices can change — a price is only true for its date.

Column chart of Weet-Bix breakfast cereal prices by box size: 375 g box \$4.00, 575 g box \$5.00, 1.2 kg box \$7.00, with the price per 100 g written on each column (\$1.07, \$0.87, \$0.58). The footnote gives the source as woolworths.com.au, viewed 26 August 2026, and notes that prices can change, so a price is only true for its date.

Figure 7. Checked prices for the same cereal. The footnote names the source and the date — and warns that prices change.

Look at the graph carefully. The class page's \$4.00 was real after a fashion — it is the price of the **small** 375 g box! Without a source, an old or half-true number looks just like a true one. And look at the per-100 g numbers: the big box costs more money, but it is the cheapest buy — \$0.58 per 100 g against \$1.07. That is exactly the kind of finding you can only trust when the numbers underneath it have sources.

Practice tasks

With help

S1. Look at Figure 1. Match each clue to its job. Clues: (a) the heading; (b) the footnote; (c) the website line. Jobs: (i) says who runs the page; (ii) says what the data is about; (iii) says where the data came from.

S2. Look at Figure 2. Who runs each of these pages? (a) abs.gov.au; (b) woolworths.com.au; (c) ato.gov.au; (d) greenhillps.vic.edu.au.

S3. Use the income table in Example 1. (a) Which place has the highest typical weekly household income? (b) Which has the lowest? (c) The footnote says where the data lives. What is the website, and what ending does it have? (d) How would you cross-check the number for Western Australia? Say the exact page you would look at.

S4. True or false? Fix each false one. (a) A table with no heading, no footnote and no website line still has a clear source. (b) Two sources that say the same thing make a number safer to use. (c) When two sources disagree, you should use the number you like better. (d) A .gov.au ending means an Australian government site.

S5. Match each claim to the best place to check it. Claims: (1) “The GST is 10%.”; (2) “A 1.2 kg box of Weet-Bix is \$7.00 this week.”; (3) “1c and 2c coins are no longer used in Australia.”; (4) “The typical weekly household income in each state.” Places: (A) the Australian Taxation Office website; (B) the Woolworths website; (C) the Royal Australian Mint website; (D) the ABS website.

S6. Here is a table with no source at all.

Snack	Students who chose it
Fruit	9
Biscuits	6
Sandwiches	4

Fix it by writing the three missing parts: (a) a heading that says what the data is about; (b) a footnote that says who collected it and when; (c) the place where a website line would go, if the data had come from a website.

On your own

U1. Tom saw a TV ad that says a sports drink helps kids run faster. He wants to know if that is true. (a) Write one question Tom can ask about *the source* of the ad — who is saying this, and what do they want? (b) Name one place Tom could cross-check the claim, and say what he would look for there.

U2. Figure 8 is a model data card about jobs in families (the kind of survey you met in Section 1D). The class data in it is made up. Make your own data card for a real survey of your class: “jobs in our families”. Your card must have (a) a heading, (b) your data, and (c) a footnote with *who* collected it and *when*. Then answer: which of the three clues — heading, footnote, website line — would a reader use to find your source, and why?

Jobs in our families — Year 5 class survey		HEADING what the data is about
Job kind	Number of families	
Health	6	
Trades	4	
Shops	3	THE DATA the numbers collected
Teaching	2	
Farming	1	
Survey collected by Room 12, Green Hill Primary School, August 2026. 16 families answered.		FOOTNOTE who collected it, and when

A model card — the class data in it is made up.

A model data card titled ‘Jobs in our families — Year 5 class survey’ with a small table of job kinds and numbers of families, and a footnote naming who collected the survey and when. Red arrows label the heading, the data and the footnote.

Figure 8. A model data card for U2 — the card’s own class numbers are made up, but every part of it is the real shape of a sourced data card.

U3. Two websites both give the price of the same school bag at the same shop. One says \$30. One says \$45. No page shows a date. Write the three steps you would take next, in order, and say why each step helps.

U4. Priya is making a budget for her birthday party (the kind of budget from Section 2C). Her numbers are: cake mix \$12, drinks \$8, party games \$0 (her own games), plates \$6, and \$30 saved in her money tin. For each number, write where it came from or where Priya should get it from — a shop website, a price tag in the shop, her own tin. Then answer: which of these numbers might be different if you checked it again next month, and why?

Think like an investigator

Your friend says: “Most Australian families spend more money on food than on anything else.” You do not know yet if that is true — and that is fine. The skill is knowing how to find out. Name **two** places you would check, and for each say exactly what you would look for. (Do not answer yes or no first. Sources first, answers second.)

Answers

S1. (a) → (ii); (b) → (iii); (c) → (i).

S2. (a) the Australian Bureau of Statistics — an Australian government office; (b) Woolworths — a business; (c) the Australian Taxation Office — a government office; (d) a school — an education place.

S3. (a) the Australian Capital Territory, \$2,373; (b) Tasmania, \$1,358; (c) abs.gov.au — a .gov.au ending; (d) open abs.gov.au, find the 2021 Census QuickStats page for Western Australia, and look for \$1,815. If it matches the table, the table's number is safer to use.

S4. (a) False — with no heading, footnote or website line, you cannot tell where the data came from, so it has no clear source. (b) True. (c) False — when sources disagree you look for another source and check the dates; you never pick the number you like better. (d) True.

S5. 1 → A; 2 → B; 3 → C; 4 → D.

S6. Sample answer: (a) heading — “Morning tea choices — Room 12 vote, August 2026”; (b) footnote — “Counted by the Room 12 health group, 24 August 2026”; (c) the website line goes under the table with the footnote, for example “Source: room12 class page, greenhillps.vic.edu.au”. (Any heading that says what the data is about, and any footnote that says who and when, is correct.)

U1. Sample answer: (a) Who paid for this ad? The drink company made it, and they want us to buy the drink — so the ad is not a neutral source. (b) He could cross-check with a health website run by the government (a .gov.au site) and look for what it says about sports drinks and kids.

U2. Sample answer: the card must show a heading (for example “Jobs in our families — Grade 5B survey”), a small table of the class's real counts, and a footnote such as “Survey collected by Grade 5B, 25 August 2026”. A reader would use the footnote, because the data was collected by the class, not by a website — the footnote names who and when. (If the class put its card on the school website, the website line would also point to the school.)

U3. Sample answer: Step 1 — look for a date on both pages, or a date in each address or footnote, because the shop may have changed its price and one page may be old. Step 2 — go to the shop's own website (or ring the shop) as a third source, because the shop writes its own prices. Step 3 — if the two websites still disagree with the shop, do not use either number for the bag; say in your work that the sources disagree. Each step helps because it replaces a guess with a check.

U4. Sample answer: cake mix \$12 — from a shop website or a price tag (name the shop and the date); drinks \$8 — same; party games \$0 — from Priya herself, the source is “her own games”; plates \$6 — shop website or price tag; \$30 — from Priya's money tin, counted by her. The shop prices (cake mix, drinks, plates) might be different next month, because prices change — a price is only true for its date. The \$0 and the \$30 come from Priya's own things, so they are safe until she spends or saves more.

Think like an investigator. Sample answer: First, the ABS website (abs.gov.au) — look for data about what Australian households spend their money on, and see which kind of spending is biggest. Second, cross-check with another source, for example a bank or a government money website, and look for the same kind of spending table. If both sources put the same kind of spending first, the claim is safer to use; if they disagree, keep checking before answering yes or no. (Any two sensible checkable places, with a clear “what I would look for”, is correct — the skill is the checking, not the yes or no.)