Choose evidence for a precise textual or numerical claim

Original skill preparation; versioned source scope

Choosing Evidence for a Textual or Numerical Claim

- Choose the quotation that best supports a claim about a text.
- Choose the data from a table or graph that supports a claim.
- Check the **relevance 相关性** of each option to the exact claim.
- Use the right **comparison base 比较基准**, counts or percentages, and calculate a change in a **percentage point 百分点**.

Restate the claim first

- Before reading the options, put the claim in your own words, with every part: who, what, and how much.
- The right evidence supports every part. An option that supports half of the claim is wrong.
- A true and interesting quotation can still be irrelevant.

Numbers: counts, rates and changes

- A count says how many; a rate or percentage says how many out of how many. Groups of different sizes need rates.
- A change from 40% to 70% is 30 percentage points, which is a 75% relative increase. Do not mix the two.
- "More successes" and "a larger improvement" are different claims and need different numbers.

Figure: Numbers: counts, rates and changes

Original hypothetical data: choose the claim's comparison

Group	Learners	Before	After	Correct (%)
A	20	12	16	60% → 80%
B	40	24	28	60% → 70%

- Table: group A, 20 learners, 12 correct before and 16 after (60% to 80%); group B, 40 learners, 24 before and 28 after (60% to 70%)
- Match each part of the diagram to the text.

Evidence and cause

- A before-and-after comparison shows a change, not its cause. Practice, a different task or other events may explain it.
- Evidence for a causal claim usually needs a comparison group, ideally with random assignment.

Practice study

- **Hypothetical study.** Two groups used a revised catalogue for a second search session.
- No random assignment is reported.
- Group P had 30 users, with 12 successful searches before and 21 after.
- Group Q had 50 users, with 30 successful searches before and 35 after.

Worked example: matching numbers to claims

- P: $\frac{12}{30} = 40\%$ before, $\frac{21}{30} = 70\%$ after: up 30 points.
- Q: $\frac{30}{50} = 60\%$ before, $\frac{35}{50} = 70\%$ after: up 10 points.
- "P improved more" is supported by 30 points against 10. "Q had more successes" is supported by 35 against 21.
- Swapping them, for example using 35 against 21 to support "Q improved more", would confuse a final count with a change.

Worked example: a claim that goes too far

- The comment says the revision "must have caused every improvement".
- No random assignment or comparison group is reported, and users were simply searching for a second time, so practice could explain part of the change.
- Evidence that would help: a matched group using the old catalogue in both sessions. It would help test the cause, not prove it alone.

Common errors

- Choosing evidence that is accurate but supports a different claim.
- Comparing counts for groups of different sizes.
- Confusing percentage points with per cent change.

Common errors (2)

- Using a before-and-after change as proof of a cause.
- Choosing evidence for only half of the claim.

Key terms

- **relevance**: How directly a piece of information bears on the claim.
- **comparison base**: What a number is compared with or out of, such as a group total.
- **percentage point**: The unit for the difference between two percentages.

Check yourself

- A rate rises from 20% to 25%. What is the change in percentage points, and the relative change?
- A claim says "Town X has a higher recycling rate than Town Y." Is "X recycled 500 tonnes and Y 300" good evidence?
- A quotation is true but describes a different group from the claim. Can it support the claim?