Claim, evidence and reasoning activity

Analyse two different arguments: a claim about a small paper-bridge test and a claim about fair access to shared tablets. Separate the information provided from the reasoning that connects it to a conclusion.

TEACHER NOTES

Learning objective: identify a claim, its support, the reasoning connecting them, assumptions and a useful further question. Recognise the difference between testing an empirical claim and justifying an ethical judgement.

Planning detail	Suggested use
Audience	Approximately ages 11-16; adapt the reading and writing demands.
Duration / preparation	40 minutes / 10 minutes. These are planning estimates.
Prerequisites	Basic familiarity with a conclusion and a supporting reason. The worked examples can introduce the terms.
Materials	The two scenario cards and a worksheet per pupil or pair. No practical experiment or pupil data collection is required.

Five useful terms

- Claim: the conclusion being proposed.

- Support: evidence, relevant facts or considerations offered for that claim.

- Reasoning: the explanation of how the support is meant to justify the conclusion.

- Assumption: something the argument takes for granted.

- Further question: information or reasoning that could help assess or improve the argument.

Run the activity

1. Model the five terms (5 minutes). Use the claims and evidence guide if useful.

2. Read both fictional cases (5 minutes). Identify which question concerns what happened and which concerns what ought to happen.

3. Analyse in pairs (15 minutes). Complete the five-column worksheet for one case, then compare with a pair working on the other.

4. Challenge and revise (10 minutes). Each pair asks one further question and narrows or qualifies a claim.

5. Exit response (5 minutes). Explain why more observations can improve a test without settling every disagreement about fairness.

> **Teacher introduction**
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> Tell pupils that all figures are invented for analysis. They should use the supplied facts, mark missing information and explain rather than simply choose a side. Use the respectful disagreement guide to structure discussion.

PUPIL COPY

Read the two fictional scenarios

Case A: the paper bridges

A fictional science club compares two paper-bridge designs. Each uses one sheet from the same paper packet, crosses the same 12-centimetre gap and is loaded with identical counters until it falls. Different pupils make the bridges. They do not record how consistently each bridge was folded.

Design	Test 1	Test 2	Test 3
Arch	12 counters	11 counters	13 counters
Flat sheet	6 counters	7 counters	5 counters

A club member concludes: **'An arch is always the strongest paper-bridge design.'** Their reason is that each arch held more counters than each flat sheet in these trials.

- What do the recorded results support?

- What does the word 'always' add?

- What was not tested or controlled well enough to justify the full claim?

Case B: sharing tablets

A fictional lunchtime club has six pupils, two working tablets and twenty minutes. Everyone needs a tablet for a separate project. Two pupils must finish today; the other four have a week. All six had the same amount of tablet time at the previous session. No other devices are available today.

A pupil proposes: **'Giving everybody the same time today is the fairest solution.'** Their reason is that nobody would receive more of a shared resource than anyone else.

- Which facts are relevant to the decision?

- What view of fairness connects those facts to the conclusion?

- Could another defensible view of fairness support a different allocation?

> **Keep the cases distinct**
>
> Case A asks how far test results support a general claim. Case B also needs a reasoned judgement about what fairness requires. A number alone does not answer that question.

PUPIL RESPONSE SHEET

Analyse an argument

Choose case A or B. Put its letter at the top of your notes. Use the same structure again for the other case or copy this table onto paper.

Claim	Support	Reasoning	Assumptions	Further question
What conclusion is being proposed?	What facts, observations or considerations are offered?	How are they meant to justify the conclusion?	What is taken for granted?	What would help you assess or improve the argument?

My revised claim, including any limit or condition:

The strongest challenge to my reasoning, and how I would respond:

Success check: a clear conclusion; relevant support; an explained connection; at least one assumption; and a question that could make a difference.

TEACHER RESPONSE GUIDE

Compare possible responses

Case A: what follows from the test?

Claim: arches are always strongest. **Support:** the three arch results are 12, 11 and 13 counters; the flat-sheet results are 6, 7 and 5. **Reasoning:** better performance in these trials is being extended to every paper bridge. **Assumptions:** these trials represent other builders, folds, paper, gaps and designs. **Further question:** would the pattern recur with more carefully standardised bridges and additional designs?

A defensible revision is: 'In these six fictional tests, every arch held more counters than every flat sheet.' Pupils can also say that the results give a reason to investigate this arch design further. They cannot establish 'always', all paper types or superiority over untested designs.

If pupils calculate a mean, it is 12 counters for the arches and 6 for flat sheets. This is a summary of the supplied fictional observations, not a claim of statistical reliability. More trials help investigate variation; repeating the same uncontrolled method does not remove every weakness.

Case B: what counts as fair?

Claim: equal time today is fairest. **Support:** everyone has a project, the tablets are shared, and prior access was equal. **Reasoning:** fairness is understood as equal treatment within this session. **Assumptions:** urgency should not change the allocation, and equal minutes give a suitably equal opportunity. **Further question:** how much time is needed to finish each project, and could a rule acknowledge both urgency and everyone's access?

One defensible position protects equal turns so the rule is predictable and nobody's needs are simply ignored. Another gives limited priority to the two urgent projects, then reserves time for the others or compensates at the next session. Each needs conditions and a response to objections.

Facts about deadlines matter, but they do not by themselves prove which principle of fairness to choose. A pupil can disagree with the suggested allocation and still show excellent reasoning. Do not infer any religious or non-religious identity from the answer.

A useful contrast

'More counters were held' describes a supplied result. 'More urgent work deserves priority' adds a value judgement. Both can be discussed carefully, but they are supported in different ways.

TEACHER NOTES

Misconceptions, adaptation and use

If a pupil says...	Try this prompt
It has numbers, so it proves the claim.	Which exact part of the conclusion do those numbers support? What has not been tested?
That is only an opinion, so any answer is equally good.	Does the reason fit the facts? Is it consistent? Has the strongest objection been addressed?
An assumption is always a mistake.	Could it be reasonable? What would establish it, and what changes if it is false?
If equal time is fair, it must always be fair.	Would that rule handle a different deadline, need or previous allocation? Explain your boundary.

Adapt the task

For a shorter lesson, use one case and provide the claim in advance. Read the card aloud, allow paired talk before writing and offer the sentence frame 'This supports ___ because ___, provided that ___.'. A pupil may dictate a response or use bullet points. For extension, change one fact and ask which part of the reasoning must change.

Exit questions

- How is a reason different from simply repeating a claim?

- When is a narrower claim stronger than a sweeping one?

- Which disagreement could extra observations address, and which still needs a judgement about values?

Source and use notes

The scenarios, figures, analysis and worksheets are original. Hwb and RE Council materials provide background on enquiry and the study of different perspectives; they do not prescribe or approve this lesson. The IPO source concerns reuse of third-party works.

All classroom examples and figures in this pack are original fiction, not findings from a study or accounts of real pupils. Timings are planning estimates. Teachers should adapt the material to their learners and curriculum.

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Welsh Government Hwb: Humanities, designing your curriculum
https://hwb.gov.wales/curriculum-for-wales/areas-of-learning-and-experience/humanities/designing-your-curriculum/ - checked 3 November 2026.

RE Council: Religion and Worldviews Approach - FAQs (professional guidance)
https://religiouseducationcouncil.org.uk/resource/worldviews-introduction-faqs/ - checked 3 November 2026.

Intellectual Property Office: Exceptions to copyright https://www.gov.uk/guidance/exceptions-to-copyright - checked 3 November 2026.