

Choose a Counterexample

Ask learners to find a case that would challenge a broad rule and revise the rule accordingly.

5 min preparation | Science, Maths and Humanities

Before the lesson

Choose a claim that can be tested against a carefully selected case.

Teach it in four steps

1. Ask learners to find a case that would challenge a broad rule and revise the rule accordingly.
2. Find a case that would contradict it if true.
3. Check whether the case genuinely meets the stated conditions.
4. Revise or reject the claim using the counterexample.

Worked example: Choose a Counterexample

Claim: all rectangles have unequal adjacent sides. A square has four right angles and equal sides, so it is a rectangle that challenges the claim.

Teacher prompt: "Show the relationship and explain the choice you made."

Check understanding

Ask learners to explain why the case contradicts the claim rather than merely differs from an example.

Fade the support

Remove suggested cases and let learners search for a counterexample.

Adapt it across subjects

Science: test an overgeneralised claim about materials. Humanities: identify evidence that challenges a sweeping interpretation.

Adjust the language support

A1-A2 access: keep the subject goal; use visuals, a small word bank, pointing or drawing and partner rehearsal. Use a home language to establish meaning where helpful.

B1-B2 extension: ask for fuller explanations, precise subject vocabulary and qualifications. Reduce sentence openings when learners can organise the response independently.

These are starting points, not placement rules. Judge support from the learner's response to this task; proficiency can differ across skills.