Talk Through the Calculation

Talk through a calculation by explaining why each operation suits the relationship in the problem.

5 min preparation | Science, Maths and Humanities

Before the lesson

Select a word problem with relevant and incidental information.

Teach it in four steps

1. Talk through a calculation by explaining why each operation suits the relationship in the problem.
2. Read again to mark quantities, units and relationships.
3. Represent the relationship with a sketch, table or equation.
4. Choose a method and check the result against the original question.

Worked example: Talk Through the Calculation

A recipe for four people uses 300 g of rice. For six people, identify the scale factor 6/4 before calculating 450 g. The story context does not change the proportional relationship.

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

Check understanding

Give a new problem or flawed step and ask for the relevant relationship and justification before accepting the numerical result.

Fade the support

Remove supplied highlights and let learners choose their own representation.

Adapt it across subjects

Science: quantities and units in a practical question. Humanities: extract relevant evidence from a dense prompt.

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.