

# Don't Simplify the Science

Preserve the scientific challenge while improving language access.

5 min preparation | Science, Maths and Humanities

## Before the lesson

Identify the scientific concept and the language needed to access it separately.

## Teach it in four steps

1. Keep the original scientific question or phenomenon.
2. Show it through a diagram, demonstration or concrete model.
3. Connect key language to the representation and model an explanation.
4. Check the concept using a fresh example with less language support.

## Worked classroom example

Science: retain the particle explanation of diffusion; add labelled concentration diagrams and a short explanation frame instead of replacing it with “stuff spreads”.

Teacher prompt: “Which detail supports your explanation? Show me how you know.”

## Check understanding

Ask learners to predict movement in a new diagram and explain it using concentration.

## Fade the support

Fade labels and the frame while retaining the scientific demand.

## Adapt it across subjects

Maths: preserve reasoning while clarifying the word problem.

Humanities: preserve evaluation while annotating complex source language.

## 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.