Pencil boxes

Ages 9–11 • Mathematics • 30-minute adaptable lesson

Learning objective

Explain multiplication with equal groups and compare strategies.

Opening question

Three boxes contain six pencils each. How many pencils are there?

Discover new knowledge

Give counters and ask pupils to model equal groups independently. Use a claim only if comparison serves the objective.

Review prior learning

Ask the retrieval question. Restate a volunteered answer anonymously or use the prepared claim. Invite pupils to compare calculations, correct misconceptions and transfer.

Optional prepared claim

There are 18 pencils in total. (Teacher-created practice statement; not an actual pupil or AI quote.)

Independent evidence and teacher key

Draw three groups of six. Count 6 + 6 + 6 = 18, or write 6 × 3 = 18.
There are 18 pencils. The calculation and drawing support the claim.

Transfer and assessment

Four boxes contain seven pencils each. Show two ways to find the total. Observe whether pupils explain, question and revise based on evidence. Do not grade card colour alone.

Evaluate the Claim

Pencil boxes • Use words, drawings or oral explanation.

My first idea

Three boxes contain six pencils each. How many pencils are there?

_____

_____

A claim to evaluate

There are 18 pencils in total.

My judgement

[ ] Supported [ ] Needs checking [ ] Unsupported

What makes me think so?

_____

_____

What could I check?

_____

_____

My own conclusion

_____

_____

Try a new question

Four boxes contain seven pencils each. Show two ways to find the total.