Times-table questions that reveal more than recall

PUPIL ACTIVITY • Name: _____ Date: _____

Show your thinking

Use drawings, words or counters. This is not a race. Explain one answer to a partner.

1. Equal groups

Draw four equal groups of six. Write the multiplication and its answer.

_____

2. One more group

5 × 7 = 35. Use this to work out 6 × 7. Show what changes.

_____

3. Same total?

Are 3 × 8 and 8 × 3 equal? Draw or explain how you know.

_____

4. Missing number

6 × □ = 42. What belongs in the box? Check your answer.

_____

5. Spot the difference

A pupil says 4 × 6 = 4 + 6. Is that correct? Explain.

_____

Teacher notes

Times-table questions that reveal more than recall

Purpose and preparation

Use after pupils have met equal groups. Allow 10–15 minutes. Offer counters and accept oral explanations. Give pupils page 1; keep this page for yourself.

Answers and things to notice

1. Four groups of six give 24. Check the groups are equal.
2. 42: add one group of seven to 35. An answer of 36 may suggest confusion about what increases.
3. Both equal 24. An array rotated through a quarter turn can justify this.
4. 7: 6 × 7 = 42.
5. No: 4 × 6 = 24, while 4 + 6 = 10. A drawing should show the different structures.

Respond without labelling

Ask a follow-up before drawing conclusions. Rebuild equal groups if needed; use connected facts where the grouping is secure. Do not infer understanding from speed alone.

Adapt and revisit

Support: use groups of two or five. Challenge: explain 8 × 7 in two ways. Revisit with a different example later in the week.

Background

NCETM: Six resources for teaching and learning times tables. Original SkillFlex questions; no NCETM endorsement.

Further reading: https://www.ncetm.org.uk/features/six-resources-for-teaching-and-learning-times-tables/

Original activity and notes prepared by SkillFlex. Share the article link with colleagues. No login or pupil-data upload is needed.