Subtraction: change the grouping, not the number

PUPIL ACTIVITY • Name: _____ Date: _____

Start here

Use drawings, words or bundles of ten. A long bar can stand for one ten; a dot can stand for one one.

1. Same number, different grouping

42 = 4 tens and 2 ones = ____ tens and ____ ones after opening one bundle of ten. Draw both ways.

Before exchanging	After exchanging

2. Explain the example

42 - 17 = 25. Show how exchanging one ten helps. What stays the same when you exchange?

_____

3. Check this claim

Sam says 52 - 27 = 35. Is Sam right? Show the answer and use addition to check it.

_____

4. Predict, then solve

Which needs an exchange in the ones column: 64 - 32 or 64 - 38? Work out both.

_____

Teacher notes

Subtraction: change the grouping, not the number

Before you begin

Check that pupils know ten ones equal one ten and can partition 42. Give pupils page 1. Prepare sticks bundled in tens, base-ten blocks or simple drawings. Keep removed objects separate.

Suggested answers

1. Three tens and twelve ones: both arrangements total 42.
2. 42 becomes 30 + 12; remove 10 + 7 to leave 20 + 5 = 25. The total before subtracting stays 42.
3. Sam is incorrect. 52 - 27 = 25; 25 + 27 = 52. The proposed 35 gives 35 + 27 = 62.
4. 64 - 32 = 32 without an exchange; 64 - 38 = 26 with an exchange in the column method.

What to listen for

Does the pupil reduce the tens when making extra ones? Can they explain that regrouping preserves the total? If they make five tens and twelve ones from 52, rebuild the quantity together before trying again.

Support and extension

Accept drawings and oral explanations. Start with 32 - 16 if a smaller quantity helps. Compare counting up with exchanging for 64 - 38 once the meaning is secure; neither method needs to be used for every calculation.

A short follow-up

Tomorrow: 53 - 26 = 27; show 4 tens and 13 ones, then check 27 + 26 = 53. One response is a teaching clue, not a diagnosis. No pupil information needs to be submitted online.

Further reading: https://www.ncetm.org.uk/media/govdobx4/pska-add-q7.pdf

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