

Mixed-operation problem solving – which operation?

WHAT THIS LESSON TEACHES

The words in a story tell you which operation to use on the numbers. Look for clues like altogether (add), left (take away), teams of or each (multiply), and shared (divide).

- 'How many altogether' points to adding; 'how many are left' points to taking away.
- '6 teams of 4 players' is equal groups so we multiply; 'share 12 between 3' is a fair share so we divide.

MODEL THIS ON THE BOARD

CAMOGIE CLUB PLAYERS

- 1 Read the story: a camogie club has 6 teams and every team has 4 players. How many players are there?
- 2 Underline the action words 'every team has' — these show equal groups.
- 3 Equal groups means we multiply, so the number sentence is $6 \times 4 = ?$
- 4 Work it out: 6 groups of 4 make 24 players in total.

DISCUSSION STARTER

REFLECT Which words in a story help you choose add, take away, times or share?

ANSWER KEY

Scaffold: visual check on the page

Q1: 43 sliotars

a) **Always** — Altogether is a clear clue that the numbers are being joined by addition.

b) **Never** — The same numbers can need add or take away depending on the action words, like 30 and 12.

c) **Always** — Left tells us some are gone so we subtract.

d) **Always** — Equal groups are a multiply situation.

EXTENSION SHEET · STRETCH ANSWERS

Investigation: Invent four stories — open-ended; scan pupils' working for valid solution paths rather than a single answer.