End-of-year review: data, chance and algebra; maths-journal reflection

MODULE 10 · ALGEBRA — PATTERNS, RULES AND NUMBER SENTENCES ALGEBRA

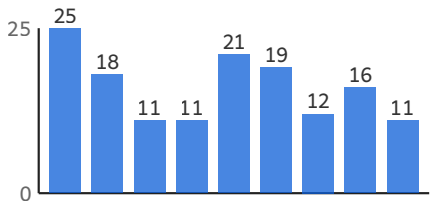
HOW TO ANSWER TODAY

- **Mode (most common).** The mode is the number that appears MOST OFTEN.
  2, 2, 3, 5, 2, 7 → 2 appears three times → mode is 2
- **Solve for x.** Do the OPPOSITE operation to both sides. + becomes −; × becomes ÷.
  x + 7 = 15 → x = 15 − 7 = 8 3x = 21 → x = 21 ÷ 3 = 7

STRETCH PROBLEMS

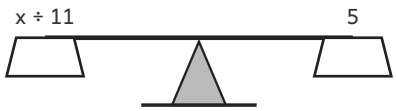
1. Aoife is threading beads to make a Halloween necklace for the school display. Her pattern so far is red, yellow, blue, red, yellow, blue, red, yellow. What colour bead comes next, and what is the repeating unit?

2. Mr Daly's class counted the number of pupils walking to school on nine different mornings: **25**, **18**, **11**, **11**, **21**, **19**, **12**, **16** and **11**. What is the mode of these counts?



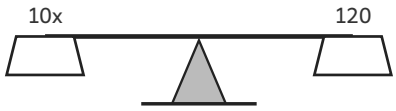
3. Cian is threading beads to make a bookmark. So far the pattern reads circle, square, circle, square, circle, square, ____ . What bead comes next, and what is the repeating unit?

4. On the school tour to the Cliffs of Moher, 5th class share all their tour photos equally into **11** albums. Each album ends up with **5** photos. If x stands for the total number of photos, then x ÷ **11** = **5**. How many photos did they take?



Find x so the scale balances.

5. Aoife's granny bakes trays of barmbrack for a Halloween sale. Each tray holds **10** slices, and there are **120** slices in total. If x is the number of trays, then 10x = **120**. How many trays did she bake?



Find x so the scale balances.