Renaming weight (kg ↔ g); reading scales

MODULE 4 · MEASURES — LENGTH, WEIGHT AND CAPACITY MEASURES

HOW TO ANSWER TODAY

- **Convert units.** To a SMALLER unit → multiply. To a BIGGER unit → divide. Common factors: cm↔mm ×10, m↔cm ×100, km↔m ×1,000, kg↔g ×1,000, l↔ml ×1,000.
  250 cm → m: ÷ 100 = 2.5 m 3.5 kg → g: × 1,000 = 3,500 g
- **Read a ruler.** Each big mark = 1 cm = 10 mm. Each little mark = 1 mm.
  3 cm + 7 mm = 37 mm = 3.7 cm

STRETCH PROBLEMS

1. Oisín is making a tessellation pattern for the corridor display. The strip of paper he is using measures **4 m** long. How long is the strip in centimetres?
2. For a school geography project, Oisín measures the school run at **42 km** on the map. His teacher asks him to write this distance in centimetres. How many centimetres is **42 km**?
3. The bus to the Cumann na mBunscol blitz travels **60 km** from the school to the county grounds. Convert this distance to centimetres.
4. Oisín measures a strip of card for the soccer team banner. On his ruler the end of the card sits **14 cm** and **2 mm** from the start. What is this reading in cm?
5. Daithí measures a strip of ribbon for the class picnic bunting. On his ruler, the ribbon reaches **19 cm** and **4 mm** from the start. What is the length of the ribbon in cm?

INVESTIGATE

Kilogram detective

Find three things that weigh about **1 kg**, three much lighter, and three much heavier. Record each weight in kilograms or grams and rename at least four of them the other way (for example 1 kg 200 g = 1,200 g). How did you judge the ones you could not put on a scale?