Decimal and fractional measures in problems

MODULE 5 · MEASURES — LENGTH, AREA, VOLUME, MASS AND CAPACITY MEASURES

HOW TO ANSWER TODAY

- **Read a ruler.** Each big mark = 1 cm = 10 mm. Each little mark = 1 mm.
  3 cm + 7 mm = 37 mm = 3.7 cm
- **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

STRETCH PROBLEMS

1. Róisín measures a bookmark for the school-bag rota. The ruler reading sits **12 cm** and **1 mm** from the start of the ruler. What is the reading in cm?

2. During hurling practice at the local pitch, Cian lines up a short mark on his hurley against a ruler. The reading sits **11 cm** and **4 mm** from the start of the ruler. What is the reading in cm?

3. 6th class are taping out a giant Snakes and Ladders track in the school yard, with the full snaking path measuring **5969 cm** from start to finish. For their maths display, they need to record the path length in kilometres. How many kilometres long is the track?

4. 6th class at St Brigid's measured the total length of ribbon left on the spools in the classroom craft store and got **7628 cm** in total. The teacher wants the answer written in kilometres for the stocktake sheet. How many kilometres is **7628 cm**?

5. Tadhg is planning a row of marigolds in the school garden flowerbed. He measures the length he needs with a ruler, and the reading sits **28 cm** and **4 mm** from the start of the ruler. What is the reading in cm?