

Measures word problems (length, weight, capacity)

MODULE 4 · MEASURES — LENGTH, WEIGHT AND CAPACITY MEASURES

HOW TO ANSWER TODAY

- **Read a ruler.** Each big mark = 1 cm = 10 mm. Each little mark = 1 mm.
 $3\text{ cm} + 7\text{ mm} = 37\text{ mm} = 3.7\text{ cm}$
- **Convert units.** To a SMALLER unit → multiply. To a BIGGER unit → divide. Common factors:
 $\text{cm} \leftrightarrow \text{mm} \times 10$, $\text{m} \leftrightarrow \text{cm} \times 100$, $\text{km} \leftrightarrow \text{m} \times 1,000$, $\text{kg} \leftrightarrow \text{g} \times 1,000$, $\text{l} \leftrightarrow \text{ml} \times 1,000$.
 $250\text{ cm} \rightarrow \text{m}: \div 100 = 2.5\text{ m}$ · $3.5\text{ kg} \rightarrow \text{g}: \times 1,000 = 3,500\text{ g}$

★ STRETCH PROBLEMS

- 1 Cian measures the side of a hopscotch square painted on the yard with his ruler. The chalked edge reaches **28 cm** and **4 mm** along the ruler. What is the reading in cm?
 A ruler reading sits 28 cm and 4 mm from the start of the ruler. What is the reading in cm?
- 2 Cara's class is tracking how far a swallow flies between visits to the bird-feeder. Over the spring, the swallow's flight path adds up to **88 km**. How many centimetres is that?
 Convert 88 km to cm.
- 3 Oisín is building a kite at the after-school crafts club. He measures the tail of his kite along a ruler and the end of the tail sits **14 cm** and **6 mm** from the start. What is the length of the tail in cm?
- 4 Cian's family drove **60 km** from Cork to visit his cousins in Waterford. He wants to write the distance in centimetres for his maths copy. How many cm is **60 km**?
 Convert 60 km to cm.
- 5 The after-school crafts club is making a long kite tail from ribbon. The ribbon they need measures **27 m** in total. How many millimetres of ribbon is that?
 Convert 27 m to mm.