

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 The Camogie coach paces out a sprint lane under the floodlights, measuring **94 m** along the sideline. She wants to mark the lane with cones every metre and needs the length in centimetres for the training plan. How many centimetres is **94 m**?
 Convert 94 m 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 The 4th class team cycle a total of **26 km** to and from the Cumann na mBunscol blitz at the county grounds. The coach asks them to write the distance in metres for the school noticeboard. How many metres did they cycle?
 Convert 26 km to m.
- 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.