

Renaming length (m ↔ cm) – a first look

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: $\text{cm} \leftrightarrow \text{mm} \times 10$, $\text{m} \leftrightarrow \text{cm} \times 100$, $\text{km} \leftrightarrow \text{m} \times 1,000$, $\text{kg} \leftrightarrow \text{g} \times 1,000$, $\text{l} \leftrightarrow \text{ml} \times 1,000$.

$$250 \text{ cm} \rightarrow \text{m}: \div 100 = 2.5 \text{ m} \cdot 3.5 \text{ kg} \rightarrow \text{g}: \times 1,000 = 3,500 \text{ g}$$

★ STRETCH PROBLEMS

- 1 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.
- 2 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.
- 3 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.
- 4 Before going out to the yard, Cian helps the caretaker weigh a sack of sand for the long-jump pit. The sack weighs **48 kg**, but the order form needs the weight written in grams. How many grams is **48 kg**?
Convert 48 kg to g.
- 5 Mr Ó Briain fills the art-room paint barrel with **14 l** of poster paint for the 3rd and 4th class mural project. He needs to share it into small bottles measured in millilitres. How many ml of paint are in the barrel?
Convert 14 l to ml.