

# Weight – estimate and weigh in kg and g on a scale

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:  
 $\text{cm} \leftrightarrow \text{mm} \times 10$ ,  $\text{m} \leftrightarrow \text{cm} \times 100$ ,  $\text{km} \leftrightarrow \text{m} \times 1,000$ ,  $\text{kg} \leftrightarrow \text{g} \times 1,000$ ,  $\text{l} \leftrightarrow \text{ml} \times 1,000$ .  
 $250 \text{ cm} \rightarrow \text{m}: \div 100 = 2.5 \text{ m}$  ·  $3.5 \text{ kg} \rightarrow \text{g}: \times 1,000 = 3,500 \text{ g}$
- **Estimate gap.** Subtract the smaller from the bigger to find how far off the estimate was.  
 Estimated 15 cm, real 12.5 cm → 2.5 cm off
- **Read a ruler.** Each big mark = 1 cm = 10 mm. Each little mark = 1 mm.  
 $3 \text{ cm} + 7 \text{ mm} = 37 \text{ mm} = 3.7 \text{ cm}$

## ★ 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 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.
- 3 Before going out to the yard, Oisín estimates that his schoolbag is **82 cm** long. When he measures it with a metre stick back in the classroom, it is actually **67 cm** long. By how many centimetres is his estimate off?  
 A pupil estimates a length as 82 cm, then measures it as 67 cm. By how much is the estimate off?
- 4 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?
- 5 In PE class, Aoife estimates the length of the long jump mat as **139 cm**. She then measures it with a tape and finds it is actually **146 cm**. By how many centimetres is her estimate off?