

Capacity – estimate and measure in l and ml with a jug

MODULE 4 · MEASURES – LENGTH, WEIGHT AND CAPACITY MEASURES

HOW TO ANSWER TODAY

- **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
- **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: $\div 100 = 2.5$ m · 3.5 kg → g: $\times 1,000 = 3,500$ g
- **Read a ruler.** Each big mark = 1 cm = 10 mm. Each little mark = 1 mm.
3 cm + 7 mm = 37 mm = 3.7 cm

★ STRETCH PROBLEMS

- 1 Aoife guesses that the long ribbon on the Halloween brack box is **109 cm** before she measures it. When she uses her measuring tape, it turns out to be **101 cm**. By how much is her estimate off?
- 2 For a school project, 4th class map the **81 km** cycle route from Dublin to Wicklow onto a wall chart. To label the chart, they need the distance written in centimetres. How many centimetres is **81 km**?
- 3 Cian measures the length of a long-jump marker with his ruler while laying out the mini athletics track in the yard. The marker reaches **14 cm** and **6 mm** along the ruler. What is the reading in cm?
- 4 At granny's farm, Tadhg guesses that a young calf stands **134 cm** tall at the shoulder. He then measures it with a tape and finds it is really **153 cm**. By how much was his estimate off?
- 5 Tadhg is measuring a strip of card for the GAA finals day banner. When he lines it up against the ruler, the end sits **28 cm** and **4 mm** from the start. What is the reading in cm?

● INVESTIGATE

How much water in a day?

Estimate how much water **you** use in one school day (drinking, washing hands, lunch). Record each amount in ml or l, then rename so you can **add them all**. About how many full 1-litre jugs is that? What would change your total the most?
