# Length — estimate and measure with a ruler (cm and mm)

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 cm + 7 mm = 37 mm = 3.7 cm
- **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

## STRETCH PROBLEMS

1. Cian measures a strip of paper to wrap around a sandwich for the class picnic. His ruler shows the strip reaches **17 cm** and **3 mm** from the start of the ruler. What is the length in cm?
2. Before going out to the yard, Tadhg guesses that the classroom door is **73 cm** wide. He then measures it and finds it is really **93 cm** wide. By how much was his estimate off?
3. Cian measures out a row for lettuce seedlings in the new school polytunnel. He estimates the row is **60 cm** long, then measures it with a metre stick as **63 cm**. By how much is his estimate off?
4. Cian guesses that the classroom noticeboard is **82 cm** wide. He then measures it carefully with a metre stick and gets **67 cm**. By how much is his estimate off?
5. Oisín guesses that his new copybook is **28 cm** long. He then measures it carefully with his ruler and gets **35 cm**. By how many centimetres is his guess off?

## INVESTIGATE

### Measure the classroom

Estimate, then measure, the length and width of your classroom. Record each length in **metres and centimetres**, and also renamed in centimetres only. Work out the perimeter. Would the whole class fit shoulder-to-shoulder along one wall? Show how you decided.