

Measurement investigation with precision

MODULE 5 · MEASURES — LENGTH, AREA, VOLUME, MASS 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
- **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 estimates the length of the hopscotch grid painted on the yard as **181.4 cm**. When she measures it carefully with a metre stick the length is **186.4 cm**. By how much is her estimate off?
- 2 On the school tour to Glendalough, Cian estimates the length of a fallen branch as **47.9 cm**. He then measures it carefully and finds it is **48.5 cm**. By how much is his estimate off?
- 3 Caoimhe estimates the length of a homework chart on the class noticeboard as **52.9 cm**. She then measures it with a ruler and finds it is **43.7 cm**. By how much is her estimate off?
- 4 Síle measures a leaf from the school garden with her ruler. The reading sits **18 cm** and **9 mm** from the start of the ruler. What is the reading in cm?
- 5 Tadhg chucks a short guide mark on the wall-ball court on the yard. His ruler reading sits **5 cm** and **4 mm** from the start of the ruler. What is the reading in cm?

● INVESTIGATE

How accurately can you measure?

Measure the same object (say, your desk) three times. Do you get the same answer each time? What causes the small differences? How could you make your measuring more reliable?
