Measures investigation: estimate then measure around the room and yard

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: ÷ 100 = 2.5 m 3.5 kg → g: × 1,000 = 3,500 g

STRETCH PROBLEMS

1. 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?

2. Cara estimates that the wall-ball line on the yard is **151 cm** above the ground. She then measures it with a metre stick and finds it is really **152 cm** high. By how much is her estimate off?

3. On a family cycle around Lough Derg, Oisín rides a total of **46 km** along the path. How many metres is that altogether?

4. The caretaker paints a long line for the new yard game and it measures **85 m** from end to end. He wants to record the length in millimetres on the plan. How many millimetres is **85 m**?

5. The map for the school cycle to Glendalough shows the route is **71 km** long. Cian wants to write the distance in metres for his fundraising poster. How many metres is **71 km**?

MEASURES