Length — metres; choosing the right unit

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: 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
- **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

WARM-UP

1. Aoife has **6 m** of green ribbon to decorate the class door for Seachtain na Gaeilge. She wants to know the length in centimetres so she can plan her border. How many centimetres is **6 m**?

   > Convert 6 m to cm.

2. For an Engineers Week woodwork project, Tadhg estimates the length of a timber strip as **24 cm**. When he measures it with a ruler, the strip is actually **19 cm**. By how much is his estimate off?

   > A pupil estimates a length as 24 cm, then measures it as 19 cm. By how much is the estimate off?

PRACTICE

1. Oisín cycles one lap of the school sponsored cycle path, which measures **31 m**. How long is one lap in centimetres?

   > Convert 31 m to cm.

2. Tadhg is helping mark out a long-puck line at the Cumann na mBunscol blitz. He estimates the distance from the sideline to the cone is **103 cm**, then measures it with a metre stick and finds it is **87 cm**. By how many centimetres is his estimate off?

   > A pupil estimates a length as 103 cm, then measures it as 87 cm. By how much is the estimate off?

CHALLENGE

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. Cian estimates the length of a long-jump take-off strip in the yard as **87 cm**. He then measures it with a metre stick and finds it is actually **67 cm**. By how much is his estimate off?