# Relationship between capacity and volume (litres and cm³)

MODULE 5 · MEASURES — LENGTH, AREA, VOLUME, MASS AND CAPACITY MEASURES

## HOW TO ANSWER TODAY

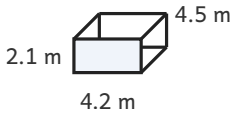
- **Convert units.** To a SMALLER unit → multiply. To a BIGGER unit → divide. Common factors: cm↔mm ×10, m↔cm ×100, km↔m ×1,000, kg↔g ×1,000, l↔ml ×1,000.
  250 cm → m: ÷ 100 = 2.5 m  3.5 kg → g: × 1,000 = 3,500 g
- **Volume.** Volume = length × width × height. Answer in cubic units ($cm^3$, $m^3$).

## STRETCH PROBLEMS

1. On their sponsored walk through the Wicklow Mountains, 6th class cover **5955 m** in total. How many kilometres have they walked?

2. Tadhg fills a water barrel with **25000** $cm^3$ of rainwater for the school garden. Given that **1 litre** = **1000** $cm^3$, how many litres are in the barrel?

3. Aoife fills the classroom fish tank with **40000** $cm^3$ of water. She knows that **1 litre** equals **1000** $cm^3$. How many litres of water are in the tank?

4. The 6th class are chalking a border around the edge of the school yard. The border measures **7993 cm** in length. How many metres is that?

5. The school is putting up a new storage shed for the PE gear. The shed is a cuboid measuring **4.2 m** long, **4.5 m** wide and **2.1 m** high. What is its volume?