

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.

$$250 \text{ cm} \rightarrow \text{m}: \div 100 = 2.5 \text{ m} \quad 3.5 \text{ kg} \rightarrow \text{g}: \times 1,000 = 3,500 \text{ g}$$

- **Volume.** Volume = length × width × height. Answer in cubic units (cm³, m³).

$$5 \times 4 \times 3 = 60 \text{ cm}^3$$

★ STRETCH PROBLEMS

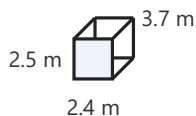
- 1 5th class at St Brigid's measured the total length of ribbon left on the spools in the classroom craft store and got **7628 cm** in total. The teacher wants the answer written in kilometres for the stocktake sheet. How many kilometres is **7628 cm**?

Convert 7628 cm to km.

- 2 Saoirse cycles from granny's farmhouse to the far field to check on the calves. The lane runs **3290 m** from the gate to the field. How many kilometres is that?

Convert 3290 m to km.

3

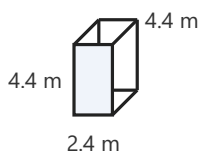


The caretaker is delivering a new storage container to keep GAA gear beside the wall-ball court. The container is a cuboid **2.4 m** long, **3.7 m** wide and **2.5 m** high. What is the volume of space inside it?

- 4 5th class are taping out a giant Snakes and Ladders track in the school yard, with the full snaking path measuring **5969 cm** from start to finish. For their maths display, they need to record the path length in kilometres. How many kilometres long is the track?

Convert 5969 cm to km.

5



The PE store room at Niamh's school is a cuboid that measures **2.4 m** long, **4.4 m** wide and **4.4 m** high. The caretaker wants to know how much space is inside before stacking new mats. What is the volume of the store room?