

Converting capacity units

MODULE 4 · MEASURES — LENGTH, MASS, CAPACITY, AREA, VOLUME

NUMBER

HOW TO ANSWER TODAY

- **Triangle area.** Area = $\frac{1}{2} \times \text{base} \times \text{perpendicular height}$. The height must be at right angles to the base.
Base 6 cm, height 4 cm $\rightarrow \frac{1}{2} \times 6 \times 4 = 12 \text{ cm}^2$
- **Read a ruler.** Each big mark = 1 cm = 10 mm. Each little mark = 1 mm.
3 cm + 7 mm = 37 mm = 3.7 cm
- **Volume.** Volume = length $\times$ width $\times$ height. Answer in cubic units (cm^3 , m^3).
 $5 \times 4 \times 3 = 60 \text{ cm}^3$

TRY IT ON THE LINE

Each column is ten times the column on its right (L, dL, cL, mL). 1 L = 1,000 mL, so L $\rightarrow$ mL is a three-column slide ($\times 1000$).

L	dL	cL	mL

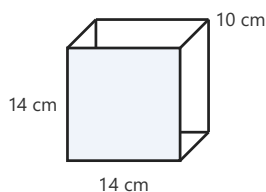
1. Build **1 L 500 mL**: 1 in L, then 500 mL = 5 in dL (0 in cL and mL). In mL? _____
2. Build **250 mL**: 2 in dL, 5 in cL. In L? _____
3. Build **2.5 L**: 2 in L, 5 in dL. In mL? _____ (slide three columns left).
4. Build **0.75 L**: 7 in dL, 5 in cL. In mL? _____

PRACTICE

1. Cian uses his ruler to measure how long a chocolate finger biscuit is at break time in 5th class. The end of the biscuit lines up at **14 cm** and **4 mm** on the ruler. What is the length of the biscuit in cm?

A ruler reading sits 14 cm and 4 mm from the start of the ruler. What is the reading in cm?

2



5th class are building a wooden storage box to hold the pieces for the giant chess board painted on the yard. The box is **14 cm** long, **10 cm** wide and **14 cm** high. What is the volume of the box?

CHALLENGE

1. Saoirse helps refill the squash dispenser at the 5th-class tuck shop. The empty jug holds **12000** cm^3 of orange squash when full. How many litres does the jug hold? (**1 litre** = **1000** cm^3)

How many litres are in 12000 cm^3 ? (1 litre = 1000 cm^3)

2. On the 5th class nature walk through the local park, Cian finds a small oak leaf and measures it against his ruler. The tip of the leaf sits **14 cm** and **6 mm** from the start of the ruler. What is the length of the leaf in cm?