

Solving real measurement problems

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

PACKING A PARCEL — TOTAL MASS AND POSTAGE

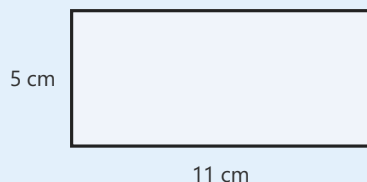
- 1 A parcel contains **3 books** at **450 g each** and **2 jumpers** at **620 g each**.
- 2 Books: $3 \times 450 = 1\,350$ g. Jumpers: $2 \times 620 = 1\,240$ g.
- 3 Total mass: $1\,350 + 1\,240 = 2\,590$ g = **2.59 kg**.
- 4 Postage costs **€7** for parcels up to 2.5 kg, **€10** up to 5 kg → this parcel costs **€10**.

HOW TO ANSWER TODAY

- **Area.** Area = length $\times$ width. Write the answer in square units (cm^2 , m^2).
 $5 \text{ m} \times 3 \text{ m} \rightarrow 15 \text{ m}^2$
- **Perimeter.** Perimeter is the distance ALL the way round. Rectangle: (length + width) $\times$ 2.
 $12 \text{ m by } 8 \text{ m} \rightarrow (12 + 8) \times 2 = 40 \text{ m}$
- **Volume.** Volume = length $\times$ width $\times$ height. Answer in cubic units (cm^3 , m^3).
 $5 \times 4 \times 3 = 60 \text{ cm}^3$

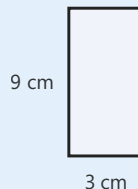
 WARM-UP

1



Saoirse is making a tessellation pattern for the 5th class corridor display. Each tile in her pattern is a rectangle measuring **11 cm** by **5 cm**. What is the area of one tile?

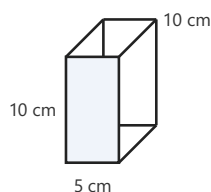
2



5th class are planning a rectangular flowerbed in the school garden. The flowerbed measures **3 cm** by **9 cm** on their scale drawing. What is the perimeter of the rectangle on the drawing?

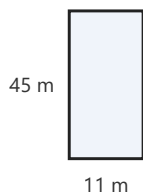
 PRACTICE

1



Saoirse is wrapping a gift box at the after-school crafts club. The box is a cuboid that measures **5 cm** long, **10 cm** wide and **10 cm** high. What is the volume of the box?

2



5th class are marking out a giant Snakes and Ladders board on the school yard for Active Week. The rectangle measures **11 m** by **45 m**. What is the perimeter of the board?