

Volume – counting unit cubes in a cuboid

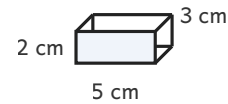
MODULE 5 · AREA, PERIMETER AND VOLUME MEASURES

HOW TO ANSWER TODAY

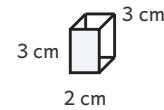
- **Volume.** Volume = length $\times$ width $\times$ height. Answer in cubic units (cm^3 , m^3).

★ STRETCH PROBLEMS

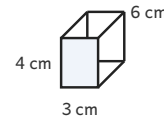
- 1 Cara makes a small clay cuboid in art class. The block is **5 cm** long, **3 cm** wide and **2 cm** high. What is its volume?



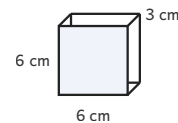
- 2 At the after-school crafts club, Oisín builds a small wooden block to weigh down his kite string. The block is **2 cm** long, **3 cm** wide and **3 cm** high. What is the volume of the block?



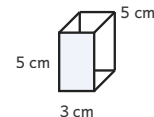
- 3 For STEM week, Oisín glues wooden blocks into a bridge model. One block is a cuboid that measures **3 cm** long, **6 cm** wide and **4 cm** high. What is its volume?



- 4 Oisín makes a small box for his junk-modelling project. The box is **6 cm** long, **3 cm** wide and **6 cm** high. What is the volume of his box?



- 5 Cian makes a display block for the school library from modelling clay. The block is **3 cm** long, **5 cm** wide and **5 cm** high. What is its volume?



● INVESTIGATE

Pack the box

A gift box is a cuboid **4 cm** long, **3 cm** wide and **2 cm** high. How many 1 cm cubes fill it? Design **two different** cuboid boxes that hold the **same** number of cubes but look different. Which box would need the most wrapping paper on the outside — and how could you check?
