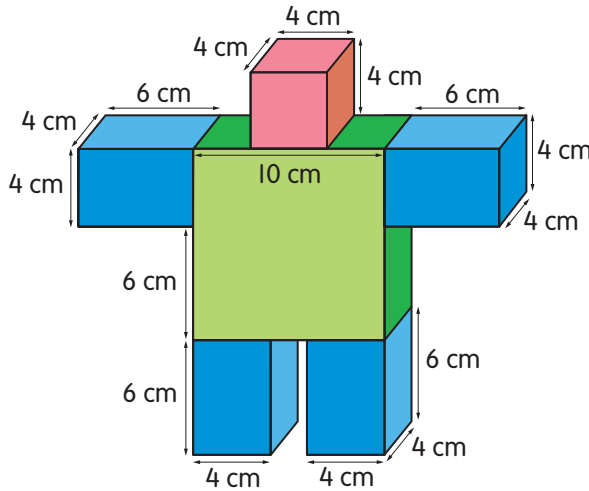


B Find the volume of a composite three-dimensional shape

Example 1

Mei Mei created a model for the competition held by her school. She used one red cube, one green cuboid, and four similar blue cuboids. Find the volume of the model she has created.



To find the volume of this composite shape, calculate the volume of the shapes that make up the composite shape. Then, add them up.

Volume = length × breadth × height

$$\begin{aligned} \text{Volume of red cube} &= 4 \text{ cm} \times 4 \text{ cm} \times 4 \text{ cm} \\ &= 64 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \text{Volume of green cuboid} &= 10 \text{ cm} \times 4 \text{ cm} \times 10 \text{ cm} \\ &= 400 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \text{Volume of blue cuboids} &= 4 \times (4 \text{ cm} \times 6 \text{ cm} \times 4 \text{ cm}) \\ &= 4 \times 96 \text{ cm}^3 \\ &= 384 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \text{Total volume} &= 64 \text{ cm}^3 + 400 \text{ cm}^3 + 384 \text{ cm}^3 \\ &= \mathbf{848 \text{ cm}^3} \end{aligned}$$



The volume of the model is **848 cm³**.



Interactive Activity:
The Incredible Urano Sapien

