# Maths Mastery

Calculate, Estimate and Compare Volume of Cubes and Cuboids

### **Estimate Cubes**

Estimate the volume of some well known cubes or near cubes:



## Calculate the Volume of Cuboids

Complete this table:

Length (cm)	Width (cm)	Height (cm)	Volume (cm³)
5	20	3	300
11	6	6	396
4	12	9	432
9	9	3	243
14	11	1	154
15	4	7	420

Create a table for a partner to complete.

Hide Answers

## Different Units

Complete this table. (Hint: convert the measurements into the same units as the answer first.)

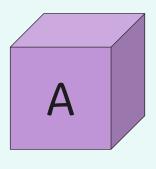
Length	Width	Height	Volume
3m	2cm	3m	0.18m <sup>3</sup>
4cm	8cm	9mm	28.8cm <sup>3</sup>
9m	0.3m	50cm	1.35m <sup>3</sup>
8km	450m	3km	10.8km³
120cm	45cm	5cm	27 000cm <sup>3</sup>
3m	9cm	6mm	0.00162m <sup>3</sup>

Create some of your own for a partner.



### Compare

Here are three 3D shapes. Order them from smallest volume to largest volume.



 $5m \times 5m \times 5m$ 

125m<sup>3</sup>

 $3m \times 4m \times 10m$ 

120m<sup>3</sup> Smallest B, A, C Largest

 $9m \times 2m \times 7m$ 

126m<sup>3</sup>

Challenge a partner to sort compare two or three cuboids by volume.

Hide **Answers** 

