18.5.2020

LO: calculate the volume of 3D shapes
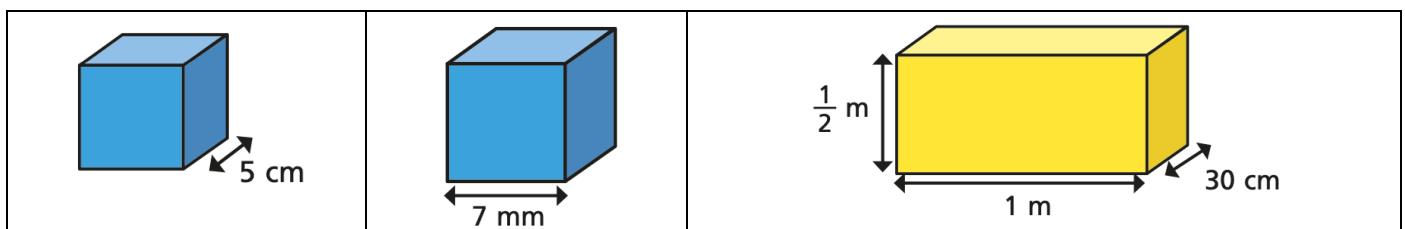
Volume is the space occupied up by a 3D object and is expressed using cubed (^{3}) notation.

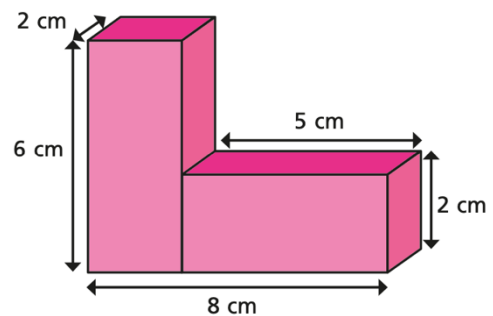The volume of a cuboid can be found by multiplying **length** x **width** x **height**.

A) Calculate the volume of the following shapes.

6 cm, 5 cm, 10 cm	8 cm, 4 cm, 6 cm
4 cm, 4 cm, 2 cm	2 cm, 8 cm, 2 cm

B) Calculate the volume of the following cubes and cuboids.

5 cm	7 mm	$\frac{1}{2}$ m, 30 cm, 1 m

C) Calculate the volume of the following shape.

2 cm

5 cm

6 cm

2 cm

8 cm

D1) A cuboid has a total volume of 60cm^3. Two of its dimensions are 6cm and 5cm. **What is the third dimension?**

D2) A rabbit digs a hole that is 30cm deep, 18cm wide and 12cm long. **How much soil will a gardener need to fill this hole?**

D3) A school sets out chairs in the hall to show a film. There are 12 rows and 8 chairs in each row. All the chairs are full and each person pays £5. **How much money is collected?**