

Volume of a cuboid

Grade 3 | Foundation | 11 questions, 37 marks

GCSE Maths topic practice



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Name: _____ **Date:** _____ **Score:** _____ / 37

- 1** A cube has sides of length 5 cm.
Work out the volume of the cube.

(1 mark)

Answer _____

- 2** A cuboid measures 6 cm by 4 cm by 3 cm.
Work out the volume of the cuboid.
State the units of your answer.

(2 marks)

Answer _____

- 3** A shipping container is a cuboid.
It is 2.5 m long, 1.2 m wide and 0.8 m high.
Work out the volume of the container. State the units of your answer.

(2 marks)

Answer _____

- 4** A cuboid has a volume of 180 cm^3 .
The base of the cuboid measures 6 cm by 5 cm.
Work out the height of the cuboid.

(3 marks)

Answer _____

- 5** A box is a cuboid measuring 60 cm by 40 cm by 30 cm.
Packets of tea are cuboids measuring 10 cm by 8 cm by 6 cm.
The packets are packed into the box so that they fill it completely with no gaps.
Work out the number of packets that fill the box.

(4 marks)

Answer _____

- 6** A crate is a cuboid measuring 1.2 m by 0.8 m by 0.75 m.
Boxes are cuboids measuring 30 cm by 20 cm by 25 cm.
The boxes fit into the crate exactly, with no gaps.
Work out how many boxes fill the crate.

(4 marks)

Answer _____

- 7** A fish tank is a cuboid with a base measuring 40 cm by 25 cm and a height of 20 cm.
The tank is filled with water to a depth of 15 cm.
All of the water is poured into cups. Each cup holds 250 ml.
Work out the number of cups that can be completely filled.

$$1 \text{ ml} = 1 \text{ cm}^3$$

(4 marks)

Answer _____

- 8** A swimming pool is a cuboid 10 m long, 5 m wide and 1.5 m deep.
The empty pool is filled with water at a rate of 2.5 m^3 every minute.
Work out how many minutes it takes to fill the pool completely.

(3 marks)

Answer _____

- 9 Three faces of a cuboid that meet at a vertex have areas 12 cm^2 , 8 cm^2 and 6 cm^2 .

Work out the volume of the cuboid.

(4 marks)

Answer _____

- 10 A water tank is a cuboid measuring 1.5 m by 0.8 m by 0.6 m.

The tank is empty. Dev fills the tank completely with water.

Water costs £1.25 for every 100 litres.

Work out the cost of the water needed to fill the tank.

$$1 \text{ m}^3 = 1000 \text{ litres}$$

(5 marks)

Answer _____

- 11 A cuboid has a base measuring 8 cm by 5 cm.

The volume of the cuboid is 320 cm^3 .

Work out the total surface area of the cuboid.

(5 marks)

Answer _____

End of questions | Total 37 marks