

Instructions: Work out the shape maths and use the answer bank to check. Read the Did you know? box. Number the 4 steps in order, tick True or False, match each word to its meaning, then write short answers.

1. Shape maths

Answer bank: (12) (24 cm³) (5) (8)

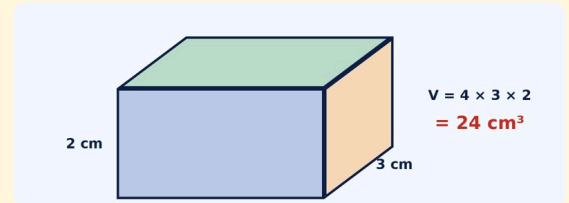
Question	Answer
Edges on a cube	
Vertices on a cube	
Faces on a square-based pyramid	
Volume of a 2 × 3 × 4 cm cuboid	

About this topic

A solid (3D shape) takes up space. Flat surfaces are faces, the lines where faces meet are edges, and the corners are vertices. A cube has 6 faces, 12 edges and 8 vertices. A solid with only flat polygon faces is a polyhedron. Spheres, cylinders and cones have curved surfaces, so they are not polyhedra.

Did you know?

- A football is close to a solid with 12 pentagons and 20 hexagons.
- Dice are cubes, and opposite faces add up to 7.
- Ice cream cones really are cones!



Volume of a cuboid

2. Put the steps in order

Write 1 to 4 in the boxes (1 = first).

- ☐ Count faces: Count the flat faces and their shapes
- ☐ Add areas: Add all face areas for the surface area
- ☐ Identify: Name the solid
- ☐ Check folding: Make sure no faces overlap when folded

3. True or false?

A cube has 6 faces.	☐ True	☐ False
A sphere has edges.	☐ True	☐ False
A net folds up to make a solid.	☐ True	☐ False
Volume is measured in cm ² .	☐ True	☐ False

4. Match up

Write the letter of the right meaning in the box.

Face	A. A corner where edges meet (plural: vertices).
Edge	B. A flat surface of a solid.
Vertex	C. A flat shape that folds up to make a solid.
Net	D. A line where two faces meet.

5. Short answers

- Name a solid with only one curved surface and no edges.

- What shapes make the net of a cylinder?

- Name an everyday object shaped like a cuboid.

- Explain in your own words: What is the difference between a face, an edge and a vertex?

- Stretch: What is a net, and why does not every arrangement of squares make a cube?

