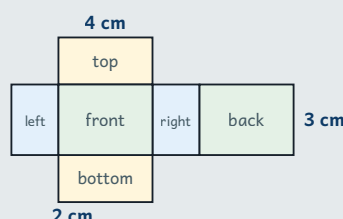


Properties and faces, edges, vertices of polyhedra

MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES REVIEW

A **polyhedron** is a solid with flat faces. Count its **faces**, **edges** and **vertices** to describe it.



- A cube: **6 faces**, **12 edges**, **8 vertices**.
- A square-based pyramid: **5 faces**, **8 edges**, **5 vertices**.

HOW TO ANSWER TODAY

- **Name a 3D shape.** Count faces (flat surfaces), edges (where two faces meet), vertices (corners). Match to the shape.
5 faces, 9 edges, 6 vertices → triangular prism

WARM-UP

- Oisín is doing a junk-modelling project in 5th class using an empty cereal box from home. He counts its properties carefully: **6** faces, **12** edges, **8** vertices, with all faces shaped like rectangles but not all of them squares. What 3D shape is the cereal box?
A 3D shape has these properties: 6 faces, 12 edges, 8 vertices; all faces are rectangles, not all squares. What shape is it?
- Cian is helping plan a new raised planter for the school garden. He sketches a shape with **6** faces, **12** edges and **8** vertices, where every face is a square. What 3D shape is the planter?
A 3D shape has these properties: 6 faces, 12 edges, 8 vertices; all faces are squares. What shape is it?

PRACTICE

- Cian is building a model for the 5th class robotics project. One of the parts has **5** faces, **8** edges and **5** vertices, with **1** square base and **4** triangular faces meeting at one apex. What 3D shape is this part?
A 3D shape has these properties: 5 faces, 8 edges, 5 vertices; 1 square base and 4 triangular faces meeting at one apex. What shape is it?
- Aoife is designing a mosaic for the school library wall and sketches a 3D shape she wants to feature. Her shape has **4** faces, **6** edges and **4** vertices, and every face is a triangle. What is the name of this shape?
A 3D shape has these properties: 4 faces, 6 edges, 4 vertices; every face is a triangle. What shape is it?