

Nets and construction of 3-D solids

MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES SHAPE & SPACE

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

★ STRETCH PROBLEMS

- 1 Oisín is sorting parts for the 5th class robotics build. He picks up a plastic piece with **2** faces, **1** edge and **1** vertex, with **1** circular base and **1** apex. What 3D shape is the piece?
- 2 Méabh is making a 3D shapes corridor display for 5th class. One of her models has **5** faces, **8** edges and **5** vertices, with **1** square base and **4** triangular faces meeting at one apex. What shape is the model?
- 3 Cian and his friends are building a den in the school orchard. They prop four triangular branches against a square wooden pallet so the tips meet at a single point above. The finished frame has **5** faces, **8** edges and **5** vertices, with **1** square base and **4** triangular faces meeting at one apex. What 3D shape have they made?
- 4 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?
- 5 Cian is helping the caretaker stack PE equipment into the storeroom in St Brigid's NS. He picks up a sturdy box that has **6** faces, **12** edges and **8** vertices, and he notices that every face is a rectangle but not all of them are squares. What 3D shape is the box?

● INVESTIGATE

How many nets make a cube?

On squared paper, find as many **different** arrangements of six squares as you can that fold up into a cube. How will you check two arrangements are really different? How many can you find?



SHAPE & SPACE