Isometric drawing — drawing a cuboid on dot paper

MODULE 6 · 2D AND 3D SHAPE, ANGLES, SYMMETRY 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. 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?

   > 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?

2. 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?

3. Eoin is helping the caretaker carry a wooden equipment box out to the school field before soccer training. He notices the box has **6** faces, **12** edges and **8** vertices, and that all the faces are rectangles but not all are squares. What 3D shape is the equipment box?

   > A 3D shape has these properties: 6 faces, 12 edges, 8 vertices; all faces are rectangles, not all squares. What shape is it?

4. 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?

   > A 3D shape has these properties: 6 faces, 12 edges, 8 vertices; all faces are rectangles, not all squares. What shape is it?