Nets — flat to 3D and back

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. 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?

3. 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?