

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.

STRETCH PROBLEMS

- 1 During STEM week, Aoife is choosing pieces for a model bridge. She picks up a 3D shape with **3** faces, **2** edges and **0** vertices, and it has **2** circular faces and **1** curved surface. What shape has she chosen?
- 2 Méabh picks up a 3D shape model from the maths shelf. The model has **4** faces, **6** edges and **4** vertices, and every face is a triangle. What shape is it?
- 3 Cian examines a 3D shape model during maths class. It has **5** faces, **8** edges and **5** vertices, with **1** square base and **4** triangular faces meeting at one apex. What shape is it?
- 4 6th class are laying out a mini athletics track in the yard and sorting the marker shapes first. One 3D shape has these properties: **2** faces, **1** edge, **1** vertex; **1** circular base and **1** apex. What shape is it?
- 5 Cian is making a junk model from empty cereal boxes in 6th class art. His 3D shape has **5** faces, **9** edges and **6** vertices, with **2** triangular faces and **3** rectangular faces. What shape is it?

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?

