

3D shapes – nets and building models

WHAT THIS LESSON TEACHES

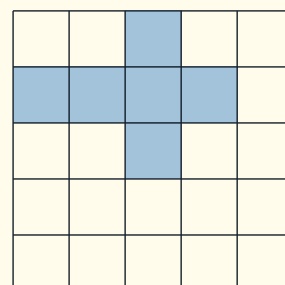
A net is a flat shape made of joined faces that folds up to make a solid. Every face of the solid shows flat on the net before you fold, so you can count the faces on the net and match them to the solid.

- A cereal box opened out flat is six joined rectangles — that flat shape is the net of the box.
- A cube net has six squares; the middle square becomes the base and one folds over to make the lid.

MODEL THIS ON THE BOARD

CHECKING A CUBE NET

- 1 The net shows four squares in a row, plus one square above and one below.
- 2 Count the squares: there are 6, and a cube needs exactly 6 faces.
- 3 The row folds up to make the four side walls; the extra squares become the lid and the base with no overlap or gap.
- 4 It closes neatly, so this flat shape is a net of a cube.



DISCUSSION STARTER

REFLECT What makes one net fold cleanly into a solid while another overlaps?

ANSWER KEY

b) Yes

c) No

Q1: 6

Q2: No

a) Always — The lesson directly states these counts for a cube.

b) Always — Both are taught as having 12 edges.

c) Always — The lesson directly states a square-based pyramid has 5 faces.

d) Always — The lesson states these counts for a square-based pyramid.

EXTENSION SHEET · STRETCH ANSWERS

S1: cylinder

S2: cone

S3: tetrahedron

S4: square-based pyramid

S5: cuboid