

3D shapes – faces, edges and corners

WHAT THIS LESSON TEACHES

A face is a flat or curved surface on a solid shape. An edge is the line where two faces meet and a corner is the point where edges meet.

→ A dice has 6 flat faces.

→ A cone has 1 corner at its pointy tip.

MODEL THIS ON THE BOARD

PARTS OF A BUILDING CUBE

1 Tap every flat side of the cube you are building: count **6** faces.

2 Trace each line where two faces join: count **12** edges.

3 Touch each pointy tip where edges meet: count **8** corners.

DISCUSSION STARTER

REFLECT

When you count faces, edges and corners, which do you find trickiest?

ANSWER KEY

b) 12

c) 8

Q1: 6

Q2: 12

Q3: 8

Q4: 3

Q5: 1

a) **Always** — Every cube has exactly six flat square faces.

b) **Never** — A cylinder has no pointy corners because its faces meet in smooth curves.

c) **Always** — The sharp tip of a cone is its single corner.

d) **Always** — Every cuboid has twelve edges just like a cube.

EXTENSION SHEET · STRETCH ANSWERS

Investigation: Build and count — open-ended; scan pupils' working for valid solution paths rather than a single answer.