



Unit 5 – 2D and 3D shapes

Naming 3D shapes (I)

→ pages 119–121

- Children should have joined:
 - top shape on left (cube) → third shape on right (cube)
 - second shape on left (cuboid) → top shape on right (cuboid)
 - third shape on left (cylinder) → second shape on right (cylinder)
 - fourth shape on left (pyramid) → fourth shape on right (pyramid)
 - bottom shape on left (sphere) → bottom shape on right (sphere)
- Children should have circled:
 - cylinder
 - second shape from left (cuboid which is not a cube)
 - cube
- There are 4 cubes.
 - There are 3 spheres.
 - There are 2 cylinders.
- cube, cuboid, sphere, pyramid

Reflect

There are many possible answers, e.g.
 cube: dice, some boxes of tissues
 cuboid: most boxes of chocolates, most mirrors
 sphere: balls, oranges
 cylinder: tin cans, unsharpened pencils
 pyramid: some chocolate boxes

Naming 3D shapes (2)

→ pages 122–124

- Children should have matched shapes to names as follows:
 - top shape → pyramid
 - second shape from top → cylinder
 - third shape from top → cube
 - bottom shape → cuboid

The cube (third shape from top) could also be matched to the name cuboid because all cubes are also cuboids. However, children in Y2 are unlikely to suggest this.
- Children should have circled the second and third shapes.
- Children should have ticked the first and third sentences.

- Children should have matched the boxes and objects as follows:
 - left-hand box → middle set of objects
 - middle box → right-hand set of objects
 - right-hand box → left-hand set of objects
- Children should have written the letters into the hoops as follows:
 - pyramids: E, G
 - spheres and cylinders: C, D, H, I
 - cuboids: A, B, F, J

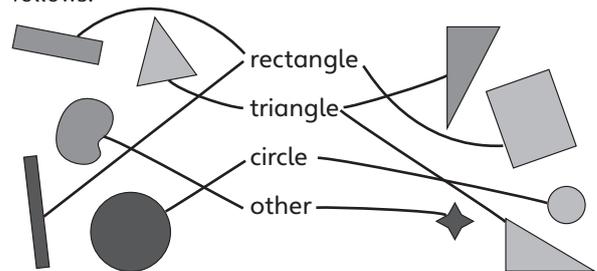
Reflect

Different answers are possible. The most likely shapes for children to name are: cube, cuboid, sphere, cylinder and pyramid.

Naming 2D shapes (I)

→ pages 125–127

- Children should have matched shapes to names as follows:



- Children should have circled the following shapes:
 - 3rd shape (non-square rectangle)
 - 2nd shape (oval)
 - 3rd shape (square)
 - 4th shape (has curved side). However, other answers are possible (such as the first shape has an even number of sides) so justification should be asked for alternatives.
- | | |
|-----------|----------|
| triangle | circle |
| square | triangle |
| rectangle | |
- Children could have arranged 6 squares into a 3x2 grid, a 2x3 grid, a 1x6 grid or a 6x1 grid.
- There are 7 circles.
 - The most likely answer is 5 but alternative answers are possible if the rectangles which represent the ground, sky and whole picture are included.
 - There are 10 triangles.

Reflect

circle	triangle
rectangle	square



Naming 2D shapes (2)

→ pages 128–130

- Children should have joined the 3D shape to the relevant 2D shape and completed sentences as follows:
 - The cube prints a square.
 - The cuboid prints a rectangle. Children might also say that the cuboid prints a square.
 - The pyramid prints a triangle.
 - The cone prints a circle.
- Children should have crossed out the following 2D shapes:

Cube: non-square rectangle (right-hand shape)
 Pyramid: right-angled triangle (second shape from left)
- cube
 - square-based pyramid
 - circle or circular
 - circle or triangle
 - cone
- The top shape is made from a rectangle and a triangle.
 The middle shape is made from a rectangle and two circles.
 The bottom shape is made from a circle and a triangle.
 Children may also say a circle and three triangles.
- The children should have matched the shape with when it was printed as follows:

rectangle → first and sixth
 square → third
 triangle → fourth
 circle → second and fifth

Reflect

Children should have matched names and shapes as follows:

- square → fourth shape (2D)
 cube → second shape (3D)
 cuboid → fifth shape (3D)
 rectangle → third shape (2D)
 triangle → first shape (2D)
 pyramid → sixth shape (3D)

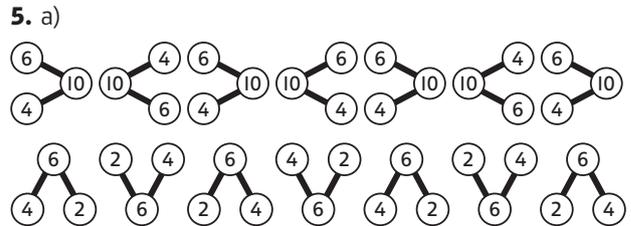
The above answers show the most likely matchings. However, the word cuboid could also be matched to the second shape since all cubes are also cuboids. Similarly, the word rectangle could also be matched to the fourth shape since all squares are also rectangles.

Making patterns with shapes

→ pages 131–133

- Children should have continued the patterns as follows:
 - large square, small square
 - square containing rectangle sloping downwards to the right, square containing rectangle sloping downwards to the left

- Children should have circled the following:
 - middle pair of shapes
 - middle pair of shapes
- The pattern has 3 repeating shapes. Children should have circled the shapes in groups of 3.
 - The pattern has 4 repeating shapes. Children should have circled the shapes in groups of 4.
- Children should have circled the following shapes:
 - middle square
 - second triangle



Reflect

Children could have made very different repeating patterns as they can choose the shapes they use and whether their repeating pattern involves 2 shapes, 3 shapes...

Examples might include:

square, triangle, square, triangle, square... (pattern has 2 repeating shapes)

square, square, triangle, square, square, triangle... (pattern has 3 repeating shapes)

End of unit check

→ pages 134–135

My journal

Children could have given alternative answers but should have been able to justify their choice by explaining what feature the cube shares with the rest of the group, e.g.

I put the shape in the group on the left because it is a 3D shape, not a 2D shape.

I put the shape in the group on the left because it is a dark shape, not a light shape.

Power puzzle

There are many different ways of colouring the shapes using 3 colours so that shapes with the same colour are only touching at the corner, e.g.

