

What should I already know?

- To be able to talk about and explore 2D and 3D shapes (circles, rectangles, triangles and cuboids) using formal and informal mathematical language e.g., sides, corners, straight, flat, round.
- To be able to select shapes appropriately: flat surfaces for building, triangular prism for a roof, etc.
- To be able to combine shapes to make new ones: an arch, a bigger triangle, etc.
- To be able to recognise, name (**triangles, circles, squares and rectangles**), compare, classify and sort 2D shapes.

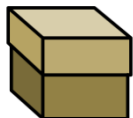
Key Knowledge and skills

Recognising 3D shapes and their properties.

The **cube** has **flat faces**.



Cube



The **cuboid** is similar to the **cube** because it has **flat faces**.



Cuboid



The **pyramid** has **flat faces** and a **corner**.



Pyramid



The **cone** has a **curved surface** and a **corner**.



Cone



The **cylinder** is different to the cone because it does not have a corner.



Cylinder



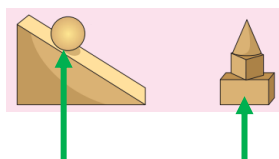
The **sphere** is similar to the **cylinder** because it has a **curved surface**.



Sphere



Select, rotate and manipulate shapes in order to develop spatial reasoning skills.



This shape can roll because it has a **curved surface**.

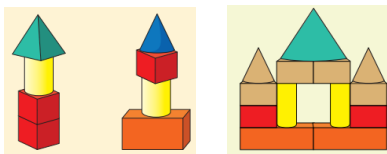


These shapes can stack because they have **flat faces**.

Sorting 3D shapes and real objects e.g., **curved surfaces** and **flat faces**.



Selecting shapes to build e.g., a tower and a castle.



Comparing and classifying

Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.



Cylinder: This shape has **circle faces**.



Cube: This shape has **square faces**.



Pyramid: I can see a **triangle**.

Key Vocabulary and definitions

Two-dimensional shape (2D shape)	A flat shape.
Three-dimensional shape (3D shape)	A solid shape.
Side	A line that joins 2 corners together.
Edge	A side on a 3D shape .
Corner	A point.
Straight	A line or side without any bends.
Flat	Smooth.
Face	The flat parts on a 3D shape .
Round	Curved like a circle.
Similar	Same
Different	Not the same.

Stem sentences:

This shape is a _____.

This shape is the **similar/different** because...

The _____ has **flat faces/a flat face/a curved surface**.

I can see a _____ on the _____.

This shape has a _____ face.