Year 3 Maths: Geometry: Shape

What should I already know?

- Identify and describe the properties of common 2D shapes, including the number of sides and line of symmetry in a vertical line.
- Identify and describe the properties of common 3D shapes, including the number of edges, vertices and faces.
- Identify 2D shapes on the surface of 3D shapes e.g., circle on a cylinder.
- Compare and short common 2D and 3D shapes and everyday objects.

Key Knowledge

Recognise 3D shapes in different orientations and describe them:

6 faces
12 edges
8 vertices

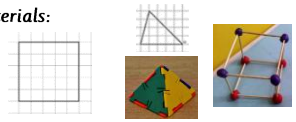
Cube

2 faces
1 curved

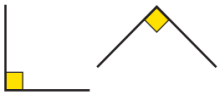
Cylinde

Cylinder, cone, sphere, pyramids, prisms.

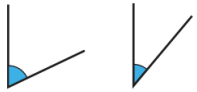
Draw or complete 2D shapes and make 3D shapes using model materials:



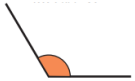
Recognise angles as a property of shape or as a description of a turn. Recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn.



Right angle
90°



Acute angle
less than 90°

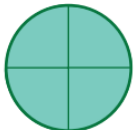


Obtuse angle
greater than 90°, less than 180°

$\frac{1}{4}$ turn

$\frac{1}{2}$ turn

$\frac{3}{4}$ turn

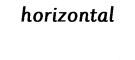


1 turn

clockwise

anticlockwise

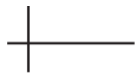
Identify horizontal and vertical lines and pairs of parallel and perpendicular lines.



horizontal

vertical

parallel



perpendicular

Key Vocabulary and definitions

edge	Where 2 **faces** meet on a **3D** shape.
vertex	A corner point, where 2 or more **sides** or **edges** meet.
vertices	More than 1 **vertex** (corner point) e.g., a **triangle** has 3 **vertices**.
face	A **flat surface** on a **3D** shape.
curved	Rounded. (A **sphere** and a **cylinder** both have 1 **curved surface**).
regular shape	When all the sides are the same length and the angles measure the same like this regular hexagon: 
irregular shape	When the sides and angles do not measure the same and the shape looks different like this irregular hexagon: 
angles	When two straight lines meet at a point (**right angle, acute angle, obtuse angle**).
turn	Movement in a circular direction (**quarter turn, half turn, three-quarter turn, one whole turn**).
clockwise	A turn that moves in the same direction as the hands on a clock.
anticlockwise	The opposite direction to **clockwise**.
vertical line	A line that goes straight up e.g., people stand up straight in a **vertical** position.
horizontal line	A line that goes across e.g., an aeroplane glides through the sky in a **horizontal** position.
intersect	Cross e.g., when two or more lines cross or lie across each other.
parallel lines	Lines that never **intersect** e.g., run along next to each other like tracks of a train.
perpendicular lines	Lines that **intersect** one and other at **90° (right angle)**.