



# Progression in Mathematics: Geometry

	Y1	Y2	Y3	Y4	Y5	Y6
Geometry: 2D Shapes	<ul style="list-style-type: none"> <li>Recognise and name common 2D shapes (e.g. square, circles, triangles)</li> </ul>	<ul style="list-style-type: none"> <li>Identify and describe the properties of 2D shapes, including number of sides and lines of symmetry in a vertical line.</li> <li>Identify 2D shapes on the surface of 3D shapes.</li> <li>Compare and sort common 2D shapes and everyday objects.</li> </ul>	<ul style="list-style-type: none"> <li>Draw 2D shapes</li> </ul>	<ul style="list-style-type: none"> <li>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</li> <li>Identify lines of symmetry in 2D shapes presented in differing orientations.</li> </ul>	<ul style="list-style-type: none"> <li>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> <li>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</li> </ul>	<ul style="list-style-type: none"> <li>Draw 2D shapes using given dimensions and angles.</li> <li>Compare and classify geometric shapes based on their properties and sizes.</li> <li>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</li> </ul>
Geometry: 3D Shapes	<ul style="list-style-type: none"> <li>Recognise and name common 3D shapes (e.g. cubes, pyramids, spheres)</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and name common 3D shapes (e.g. cubes, pyramids, spheres)</li> <li>Compare and sort common 3D shapes and everyday objects.</li> </ul>	<ul style="list-style-type: none"> <li>Make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.</li> </ul>		<ul style="list-style-type: none"> <li>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise, describe and build simple 3D shapes, including making nets.</li> </ul>
Geometry: Angles and Lines			<ul style="list-style-type: none"> <li>Recognise angles as a property of shape or description of a turn.</li> <li>Identify right angles, and how they relate to turns; knowing if angles are greater or less than a right angle.</li> <li>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> </ul>	<ul style="list-style-type: none"> <li>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</li> <li>Identify lines of symmetry in 2D shapes.</li> <li>Complete a simple figure with respect to a line of symmetry.</li> </ul>	<ul style="list-style-type: none"> <li>Know angles are measured in degrees: estimate and compare different angles.</li> <li>Draw given angles and measure them in degrees.</li> <li>Identify: angles at a point and one whole turn, angles on a line and half a turn, other multiples of <math>90^\circ</math></li> </ul>	<ul style="list-style-type: none"> <li>Find unknown angles in triangles, quadrilaterals and regular polygons.</li> <li>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</li> </ul>
Geometry: Position and Direction	<ul style="list-style-type: none"> <li>Describe position, direction and movement using turns etc.</li> </ul>	<ul style="list-style-type: none"> <li>Order and arrange combinations of mathematical objects in patterns and sequences.</li> <li>Use the correct vocabulary to describe position, direction etc including clockwise and anti etc</li> </ul>		<ul style="list-style-type: none"> <li>Describe positions on a 2D grid as coordinates in the first quadrant.</li> <li>Describe movements between positions as translations.</li> <li>Plot given points to complete a polygon.</li> </ul>	<ul style="list-style-type: none"> <li>Identify, describe and represent the position of a shape following a reflection or translation, using the correct language and know that the shape has not changed.</li> </ul>	<ul style="list-style-type: none"> <li>Describe positions on the full coordinate grid (all four quadrants).</li> <li>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</li> </ul>