



## PROGRESSION IN GEOMETRY (PROPERTIES OF SHAPE) YEAR 5

Strand	What do I already know?	What am I going to be learning?	What will I learn in Year 6?
<b>Identifying shapes and their properties</b>	<p>Y1: recognise and name common 2-D and 3-D shapes, including:</p> <ul style="list-style-type: none"> <li>• 2-D shapes [e.g. rectangles (including squares), circles and triangles]</li> <li>• 3-D shapes [e.g. cuboids including cubes), pyramids and spheres].</li> </ul> <p>Y2:</p> <ul style="list-style-type: none"> <li>• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</li> <li>• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>• identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].</li> </ul> <p>Y4 - Identify lines of symmetry in 2-D shapes presented in different orientations.</p>	<p>Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.</p>	<p>Recognise, describe and build simple 3-D shapes, including making nets.</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</p>
<b>Drawing and constructing</b>	<p>Y3:</p> <ul style="list-style-type: none"> <li>• draw 2-D shapes and make 3-D shapes using modelling materials</li> <li>• recognise 3-D shapes in different orientations and describe them</li> </ul> <p>Y4 - Complete a simple symmetric figure with respect to a specific line of symmetry.</p>	<p>Draw given angles, and measure them in degrees (<math>^{\circ}</math>).</p>	<p>Draw 2-D shapes using given dimensions and angles.</p> <p>Recognise, describe and build simple 3-D shapes, including making nets.</p>
<b>Comparing and Classifying</b>	<p>Y2 - compare and sort common 2-D and 3-D shapes and everyday objects.</p> <p>Y4 - Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</p>	<p>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p> <p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p>	<p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.</p>
<b>Angles</b>	<p>Y3:</p> <ul style="list-style-type: none"> <li>• recognise angles as a property of shape or a description of a turn</li> <li>• identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn</li> <li>• identify whether angles are greater than or less than a right angle</li> <li>• identify horizontal and vertical lines and pairs of perpendicular and parallel lines</li> </ul> <p>Y4 - Identify acute and obtuse angles and compare and order angles up to two right angles by size.</p>	<p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</p> <p>Identify:</p> <ul style="list-style-type: none"> <li>• angles at a point and one whole turn (total <math>360^{\circ}</math>)</li> <li>• angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total <math>180^{\circ}</math>)</li> <li>• other multiples of <math>90^{\circ}</math>.</li> </ul>	<p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p>
<b>Vocabulary</b>	<p>2-D, 3-D, vertex / vertices, edge, face, flat, curved, acute, obtuse, reflex, degrees, clockwise / anticlockwise, right angle, straight line, point, vertical, horizontal, parallel, symmetrical / lines of symmetry, quadrilateral, triangle, regular / irregular, scalene, equilateral, isosceles, rhombus, parallelogram, trapezium</p>		