

# CG Maths Progression Map – Geometry (properties of shape)

	<u>EYFS</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<u>Shape Vocabulary</u>		<ul style="list-style-type: none"> <li>•recognise and name common 2-D shapes (e.g. Square, circle, triangle)</li> <li>•recognise and name common 3-D shapes (e.g. Cubes, cuboids, pyramids &amp; spheres)</li> </ul>	vertices, edges, faces, symmetry)	<ul style="list-style-type: none"> <li>•identify horizontal and vertical lines and pairs of perpendicular and parallel lines</li> </ul>			<ul style="list-style-type: none"> <li>•illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</li> </ul>
<u>Properties of 2-d shape</u>	Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.		<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>•compare and sort common 2-D and 3-D shapes and everyday objects.</li> </ul>	<ul style="list-style-type: none"> <li>•draw 2-D shapes</li> </ul>	<ul style="list-style-type: none"> <li>•compare and classify geometric shapes, including quadrilaterals and triangles, based on properties and sizes</li> <li>•identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>•complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ul>	<ul style="list-style-type: none"> <li>•use the properties of rectangles to deduce related facts and find missing lengths and angles</li> <li>•distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> </ul>	<ul style="list-style-type: none"> <li>•draw 2-D shapes using given dimensions and angles</li> <li>compare and classify geometric shapes based on their properties and sizes</li> </ul>
<u>Properties of 3-d shape</u>	Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compose and decompose shapes so that children can recognise a shape can have other		<ul style="list-style-type: none"> <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.</li> <li>compare and sort common 2-D and 3-D</li> </ul>	<ul style="list-style-type: none"> <li>•make 3-D shapes using modelling materials</li> <li>recognise 3-D shapes in different orientations and describe them</li> </ul>		<ul style="list-style-type: none"> <li>•identify 3-D shapes, including cubes and other cuboids, from 2-D representations</li> </ul>	<ul style="list-style-type: none"> <li>•recognise, describe and build simple 3-D shapes, including making nets</li> <li>•find unknown angles in any triangles, quadrilaterals, and regular polygons</li> </ul>

	shapes within it, just as numbers can.		shapes and everyday objects.				
<b><u>Angles</u></b>				<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 or less than right angle</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> </ul>	<ul style="list-style-type: none"> <li>•know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</li> <li>•draw given angles, and measure them in degrees (°)</li> <li>•identify angles at a point and one whole turn (total 360°); at a point on a straight line and ½ a turn (total 180°)</li> <li>•identify other multiples of 90°</li> </ul>	<ul style="list-style-type: none"> <li>•recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</li> </ul>
<b><u>Position &amp; Direction</u></b>	Draw information from a simple map. Continue, copy and create repeating patterns.	<ul style="list-style-type: none"> <li>•describe position, direction and movement, including whole, half, quarter and three-quarter turns.</li> </ul>	<ul style="list-style-type: none"> <li>•order and arrange combinations of mathematical objects in patterns and sequences.</li> <li>•use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and ¾ turns</li> </ul>		<ul style="list-style-type: none"> <li>•describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>•describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>•plot specified points and draw sides to complete a given 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 appropriate 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>