

Geometry - Properties of shapes

	IDENTIFYING SHAPES AND THEIR PROPERTIES					
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Play and explore shapes in a number of different contexts.</p> <p>Identify the 2D shapes squares, circles, rectangles and triangles.</p> <p>Begin to identify the 3D shapes: cones, sphere, cube, cuboid and pyramids.</p> <p>Talk about and discuss the properties of shapes.</p>	<p>recognise and name common 2-D and 3-D shapes, including:</p> <ul style="list-style-type: none"> * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres]. 	<p>identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</p> <p>identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</p>		<p>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 (appears also in Drawing and Constructing)</p> <p>illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</p>
EYFS	DRAWING AND CONSTRUCTING					
<p>Create constructions with 3D shapes and explore the properties of these.</p> <p>Construct different patterns with shapes and put shapes together in different ways.</p>			<p>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p>	<p>complete a simple symmetric figure with respect to a specific line of symmetry</p>	<p>draw given angles, and measure them in degrees (°)</p>	<p>draw 2-D shapes using given dimensions and angles</p>

	COMPARING AND CLASSIFYING					
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Compare shapes and talk about why they are similar and why they might be different.		compare and sort common 2-D and 3-D shapes and everyday objects		compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	use the properties of rectangles to deduce related facts and find missing lengths and angles	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons recognise, describe and build simple 3-D shapes, including making nets (appears also in Identifying Shapes and Their Properties)
					distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
	ANGLES					
			recognise angles as a property of shape or a description of a turn		know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	
			identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle	identify acute and obtuse angles and compare and order angles up to two right angles by size	identify: * angles at a point and one whole turn (total 360°) * angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) * other multiples of 90°	recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
			identify horizontal and vertical lines and pairs of perpendicular and parallel lines			