

Geometry: Properties of Shape

IDENTIFYING SHAPES AND THEIR PROPERTIES

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<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>Numberblocks: Flatland- 2D shapes https://www.bbc.co.uk/iplayer/episode/b0bp2qlb/numberblocks-series-3-flatland</p> <p>Numberblocks: The Way of the Rectangle-rectangle https://www.bbc.co.uk/iplayer/episode/m000271w/numberblocks-series-3-the-way-of-the-rectangle</p>	<p>identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</p> <p>Numberblocks: Flatland- 2D shapes https://www.bbc.co.uk/iplayer/episode/b0bp2qlb/numberblocks-series-3-flatland</p> <p>Numberblocks: The Way of the Rectangle-rectangle https://www.bbc.co.uk/iplayer/episode/m000271w/numberblocks-series-3-the-way-of-the-rectangle</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>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>illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</p>
DRAWING AND CONSTRUCTING					
		<p>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in</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 ($^{\circ}$)</p>	<p>draw 2-D shapes using given dimensions and angles</p>

		<p>different orientations and describe them</p> <p>Number blocks: Flatland https://www.bbc.co.uk/iplayer/episode/b0bp2qlb/numberblocks-series-3-flatland</p> <p>Number blocks: The Way of the Rectangle https://www.bbc.co.uk/iplayer/episode/m000271w/numberblocks-series-3-the-way-of-the-rectangle</p>			<p>recognise, describe and build simple 3-D shapes, including making nets (appears also in Identifying Shapes and Their Properties)</p>
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COMPARING AND CLASSIFYING

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>compare and sort common 2-D and 3-D shapes and everyday objects</p>		<p>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>compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</p>
				<p>distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p>	

ANGLES

		<p>recognise angles as a property of shape or a description of a turn</p>		<p>know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p>	
		<p>identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and</p>	<p>identify acute and obtuse angles and compare and order angles up to two right angles by size</p>	<p>identify: * angles at a point and one whole turn (total 360°)</p>	<p>recognise angles where they meet at a point, are on a straight line, or are vertically opposite,</p>

		four a complete turn; identify whether angles are greater than or less than a right angle		* angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) * other multiples of 90°	and find missing angles
		identify horizontal and vertical lines and pairs of perpendicular and parallel lines			