

Geometry: Properties of Shapes

EYFS

Shape and Space

Developing spatial awareness – experiencing different viewpoints
 Shape awareness – developing shape awareness through construction
 Identifying similarities between shapes
 Showing awareness of properties of shape
 Describing properties of shape
 Developing awareness of relationships between shapes

IDENTIFYING SHAPES AND THEIR PROPERTIES

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres]. Autumn 3	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line Spring 3		identify lines of symmetry in 2-D shapes presented in different orientations Summer 5	identify 3-D shapes, including cubes and other cuboids, from 2-D representations Summer 2	recognise, describe and build simple 3-D shapes, including making nets (appears also in Drawing and Constructing) Summer 1
	identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces Spring 3				illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Summer 1
	identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] Spring 3				

DRAWING AND CONSTRUCTING

		draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them Summer 3	complete a simple symmetric figure with respect to a specific line of symmetry Summer 5	draw given angles, and measure them in degrees ($^{\circ}$) Summer 2	draw 2-D shapes using given dimensions and angles Summer 1
					recognise, describe and build simple 3-D shapes, including making nets (appears also in Identifying Shapes and Their Properties) Summer 1

COMPARING AND CLASSIFYING

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	compare and sort common 2-D and 3-D shapes and everyday objects Spring 3		compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Summer 5	use the properties of rectangles to deduce related facts and find missing lengths and angles Summer 2	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons Summer 1
				distinguish between regular and irregular polygons based on reasoning about equal sides and angles Summer 2	

ANGLES

		recognise angles as a property of shape or a description of a turn Summer 3		know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles Summer 2	
		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 Summer 3	identify acute and obtuse angles and compare and order angles up to two right angles by size Summer 5	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° Summer 2	recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles Summer 1
		identify horizontal and vertical lines and pairs of perpendicular and parallel lines Summer 3			