Progression in Geometry: Properties of Shapes

	Identifying Shapes and their Properties
R	• Develop an awareness of relationships between shapes (e.g.) spot shapes within shapes • Describe properties of shapes. • Show an awareness of properties of shapes (e.g.) Using cylinders for wheels as they can roll. • Shape awareness: developing shape awareness through construction.

Y1	• 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].

Y2	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line • identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
Y3	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line (Consolidation from Year 2) • identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces (Consolidation from Year 2) • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] (Consolidation from Year 2)
Y4	• identify lines of symmetry (vertical, horizontal, diagonal) in 2-D shapes presented in different orientations
Y5	• identify 3-D shapes, including cubes and other cuboids, from 2-D representations
Y6	• recognise, describe and build simple 3-D shapes, including making nets – draw and make (appears also in Drawing and constructing) • illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius

Progression in Geometry: Properties of Shapes

	Drawing and Construction	Comparing and Classifying
R		• Identify similarities between shapes.
Y1		
Y2		• compare and sort common 2-D and 3-D shapes and everyday objects
Y3	• draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them (Nets made only)	
Y4	• complete a simple symmetric figure with respect to a specific line of symmetry	• compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
Y5	• draw given angles, and measure them in degrees (°)	• use the properties of rectangles to deduce related facts and find missing lengths and angles • distinguish between regular and irregular polygons based on reasoning about equal sides and angles
Y6	• draw 2-D shapes using given dimensions and angles • recognise, describe and build simple 3-D shapes, including making nets – draw and make (appears also in Identifying Shapes and Their Properties)	• compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

	Angles
R	

Progression in Geometry: Properties of Shapes

Y1	
Y2	
Y3	• recognise angles as a property of shape or a description of a turn • 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 horizontal and vertical lines and pairs of perpendicular and parallel lines
Y4	• recognise angles as a property of shape or a description of a turn (Consolidation from Year 3) • identify acute and obtuse angles and compare and order angles up to two right angles by size

Y5	• know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles •
	Identify:
	      * angles at a point and one whole turn (total 360°)
	      * angles at a point on a straight line and ½ a turn (total 180) * other multiples of 90°

Y6	• recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles