PROGRESSION IN GEOMETRY (PROPERTIES OF SHAPE) YEAR 6

Strand	What do I already know?	What am I going to be learning?	What will I learn next?
Identifying shapes and their properties	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]. Y4 - Identify lines of symmetry in 2-D shapes presented in different orientations. Y5 - Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.	Recognise, describe and build simple 3-D shapes, including making nets. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.	
Drawing and constructing	Y3: • draw 2-D shapes and make 3-D shapes using modelling materials • recognise 3-D shapes in different orientations and describe them Y4 - Complete a simple symmetric figure with respect to a specific line of symmetry. Y5 - Draw given angles, and measure them in degrees (◦).	Draw 2-D shapes using given dimensions and angles. Recognise, describe and build simple 3-D shapes, including making nets.	KS3 maths
Comparing and Classifying	Y2 - compare and sort common 2-D and 3-D shapes and everyday objects. Y4 - Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. Y5 - Use the properties of rectangles to deduce related facts and find missing lengths and angles. Y5 - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.	
Angles	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 - 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 a whole turn = 360◦; angles on a straight line and a ½ turn = 180◦.	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	
Vocabulary	2-D, 3-D, vertex / vertices, edge, face, flat, curved, acute, obtuse, reflex, degrees, clockwise / anticlockwise, right angle, straight line, point, vertical, horizontal, parallel, symmetrical / lines of symmetry, quadrilateral, triangle, regular / irregular, scalene, equilateral, isosceles, rhombus, parallelogram, trapezium		