Barford St. Peter's C.E. (V.A.) Primary School

Together we love; together we learn

Maths Knowledge and Skills Progression for: GEOMETRY – PROPERTIES OF SHAPE

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Identifying shapes and their properties	• It is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures.	• 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].	• 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]		• identify lines of symmetry in 2-D shapes presented in different orientations	• 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 shapes				• draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	• complete a simple symmetrical figure with respect to a specific line of symmetry	• 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

Barford St. Peter's C.E. (V.A.) Primary School

Together we love; together we learn

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Comparing and classifying			• 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 • 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				• 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 line	• identify acute and obtuse angles and compare and order angles up to two right angles by size	• 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°	• recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles