Eton Wick C of E First School PROGRESSION MAP: Geometry



IDENTIFYING SHAPES AND THIER PROPERTIES							
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
select, rotate and manipulate shapes to develop spatial reasoning skills.	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 (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	
		DF	RAWING AND CONSTRUC				
compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.			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 symmetric 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 (appears also in Identifying Shapes and Their Properties)	

		COMPARING AND CLA	ASSIFYING			
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		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	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and	
				distinguish between regular and irregular polygons based on reasoning about equal sides and angles	regular polygons	
		ANGLES				
		recognise angles as a property of shape or a description of a turn		know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles		
		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 acute and obtuse angles and compare and order angles up to two right angles by size	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	
		identify horizontal and vertical lines and pairs of perpendicular and parallel lines				

POSITION, DIRECTION AND MOVEMENT							
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
	describe position, direction and movement, including half, quarter and three-quarter turns.	use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns	Teal 3	describe positions on a 2-D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down	identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes.	
		(clockwise and anti-clockwise)	PATTERN	plot specified points and draw sides to complete a given polygon			
continue, copy and create repeating patterns.		order and arrange combinations of mathematical objects in patterns and sequences					