Curriculum 2014 Progression chart **Geometry**		
	Properties of shapes	**Position and direction**

Y1	*Pupils should be taught to:*
	• 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).
		Pupils should be taught to:
		• describe position, directions and movements, including half, quarter and three-quarter turns.

Y2	*Pupils should be taught to:* • identify and describe the properties of 2-D shapes, including the number of sides and 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 • compare and sort common 2-D and 3-D shapes and everyday objects.	*Pupils should be taught to:* • order and arrange combinations of mathematical objects in patterns • use mathematical vocabulary to describe position, direction and movement including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise), and movement in a straight line.
Y3	*Pupils should be taught to:* • draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them • recognise that angles are 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	*Pupils should be taught to:* • compare and classify geometric shapes, including quadrilaterals and triangles**,** based on their properties and sizes • identify acute and obtuse angles and compare and order angles up to two right angles by size • identify lines of symmetry in 2-D shapes presented in different orientations • complete a simple symmetric figure with respect to a specific line of symmetry.	*Pupils should be taught to:* • 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 • plot specified points and draw sides to complete a given polygon**.**

Y5	*Pupils should be taught to:*
	• identify 3-D shapes, including cubes and other cuboids, from 2-D representations
	• know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
	• draw given angles, and measure them in degrees (^{o})
	• identify:
	  ➢ angles at a point and one whole turn (total 360^{o})
	  ➢ angles at a point on a straight line and ½ a turn (total 180^{o})
	  ➢ other multiples of 90^{o}
	• 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.
		Pupils should be taught to:
		• 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.

Y6	*Pupils should be taught to:* • draw 2-D shapes using given dimensions and angles • recognise, describe and build simple 3-D shapes, including making nets • compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons • illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius • recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.	*Pupils should be taught to:* • 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.