## Maths Progression Document Geometry Year 3 and 4

Reception Vocabulary

**Properties of Shape** 

shape, pattern, flat, curved, straight, round, hollow, solid

sort, make, build, draw, size, bigger, larger, smaller, symmetrical, pattern, repeating pattern, match

2D Shape 3D Shape

corner, side, rectangle (including square), circle, triangle

face, edge, vertex, vertices, cube, pyramid, sphere, cone

Position and direction

Position, over, under, above, below, top, bottom, side

on, in, outside, inside, around, in front, behind, front, back, beside, next to, opposite, apart, between, middle, edge, corner, direction, left, right, up, down, forwards, backwards, sideways, across, next to, close, near, far, along, through, to, from, towards, away from, movement, slide, roll, turn, stretch, bend, whole turn, half turn

Year 1 Vocabulary Properties of Shape

Symmetry, symmetrical pattern

2D Shape 3D Shape

Point, pointed, hexagon, pentagon, octagon Cuboid, cylinder

Position and Direction

Underneath, centre, journey, quarter turn, three-quarter turn

Year 2 Vocabulary

**Properties of Shape** 

Surface, line symmetry

2D Shape 3D Shape

Rectangular, circular, triangular Prism, 3D, 3 dimensional

(re-visit pentagon, hexagon, octagon)

Position and Direction

Route, higher, lower, Clockwise, anticlockwise, Right angle, straight line.

Key Vocabulary Year 3 Vocabulary

**Properties of Shape** 

construct

Year 4 Vocabulary

Properties of shape

Perimeter, centre, angle, right-angled, base, square-based, reflect, reflection, regular, irregular

## **Maths Progression Document Geometry Year 3 and 4**

	2D Shape pentagonal, hexagonal, octagonal, quadrilateral, right-angled, parallel, perpendicular  3D Shape Hemisphere, prism, triangular prism, spherical, cylindrical  Position and Direction compass point, north, south, east, west, N, S, E, W, horizontal, vertical, diagonal, angle is a greater/smaller angle than, acute angle, obtuse angle	2D Shape 2D, two-dimensional, oblong, rectilinear, equilateral triangle, isosceles triangle, scalene triangle, heptagon, parallelogram, rhombus, trapezium Polygon  3D Shape tetrahedron, polyhedron  Position and Direction north-east, north-west, south-east, south-west, NE, NW, SE, SW translate, translation, rotate, rotation, degree, reflection, ruler, set square
Year group	Year 3	angle measurer, compass  Year 4
Key skills	<ul> <li>Draw 2-D shapes and make 3-D shapes using modelling materials.</li> <li>Recognise 3-D shapes in different orientations and describe them.</li> <li>Recognise angles as a property of shape or a description of a turn.</li> <li>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.</li> <li>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> </ul>	<ul> <li>Identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes.</li> <li>Identify lines of symmetry in 2D shapes presented in different orientations.</li> <li>Complete a simple symmetric figure with respect to a specific line of symmetry.</li> <li>Describe positions on a 2D gird as co-ordinates in the first quadrant.</li> <li>Plot specific points and draw sides to complete a given polygon.</li> <li>Describe movements between positions as translations of a given unit to the left/right and up/down</li> </ul>
Notes	It is really important that children understand that 2-D shapes are actually flat and the manipulatives they handle in class are representations of the shapes (it is not possible to draw around 2D shapes — the image created on the paper is a 2D shape but what they draw around was 3D).  Ensure we show shapes in different orientations and in different proportions.	