	Shape and direction		**When Vocabulary is first introduced**
EYFS	Shape and sorting (Autumn) Shape and pattern (Spring)	• explore characteristics of everyday objects and shapes and use mathematical language to describe them • shows an interest in shape and space by playing with shapes by sustained construction activity • explore characteristics of everyday objects and shapes (focusing on 3-D shapes) • use positional language • use mathematical language associated with shape • classify and sort everyday objects • talk about properties of shapes • explore characteristics of everyday objects and shapes and use mathematical language to describe them • explore characteristics of everyday objects and shapes (focusing on 2-D shapes) • use mathematical language associated with shape • classify and sort shapes • recognise, create and describe patterns with shapes • use mathematical language to describe size and position	Above Below Between Circle Corner Cube Cuboid Curved Surface Cylinder 2D 3D Direction Edge Face Flat Length Long Pattern Rectangle Side Size Sort Square Straight Surface Tall Triangle Vertex Vertices

Year 1	Shapes and patterns (Autumn)	• recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles]; 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] • describe position, direction and movement, including whole and half turns	Cone Continuous Surface Pyramid Sphere Oblong Position Whole Turn Half Turn Right Left Volume
Year 2	Faces, shapes and patterns; lines and turns (Spring)	• 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 and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line • compare and sort common 2-D and 3-D shapes and everyday objects • order and arrange combinations of mathematical objects in patterns and sequences • 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 (clockwise and anticlockwise)	Angle Pentagon Hexagon Octagon Heptagon Quadrilateral Right Angle Rotation Symmetry Vertical
Year 3	Angles and shape (Summer)	• 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 • draw 2-D shapes and make 3-D shapes using modelling materials • recognise 3-D shapes in different orientations and describe them • measure the perimeter of simple 2-D shapes	Acute Horizontal Obtuse Parallel Perpendicular Perimeter Prism Polygon Regular Irregular

			Square-based Pyramid Triangular-based Pyramid Degrees
Year 4	. 2-D shape and symmetry (Summer) Position and direction 3-D shape	• 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 • 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 • identify 3-D shapes, including cubes and other cuboids, from 2-D representations	Area Coordinate Grid Isosceles Kite Parallelogram Plot Point Protractor Rectilinear Rhombus Scalene Square Centimetre Trapezium Quadrant Translation
Year 5	Angles (Spring) Transformations (Spring)	• 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 360o); angles at a point on a straight line and 1 2 a turn (total 180o); other multiples of 90o	Angle at point Angle on a line Congruent Decagon Dodecagon Nonagon Polyhedron Reflection Reflex Angle Scale (Not to Scale)

		• 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 • use the properties of rectangles to deduce related facts and find missing lengths and angles • describe positions on the full coordinate grid (all four quadrants) • interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero • use negative numbers in context, and calculate intervals across zero	Tetrahedron Transformation Radius Diameter Circumference
	2-D and 3-D shape (Summer)	• distinguish between regular and irregular polygons based on reasoning about equal sides and angles • use the properties of rectangles to deduce related facts and find missing lengths and angles • 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 diameter is twice the radius.	
Year 6	Missing angles and lengths (Autumn)	• recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. • express missing number problems algebraically • compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	Arc Centre Intersect Origin (0,0) Vertically Opposite Angles
	Coordinates and shape (Spring)	• use negative numbers in context, and calculate intervals across zero • describe positions on the full coordinate grid (all four quadrants) • draw 2-D shapes using given dimensions and angles • draw and translate simple shapes on the coordinate plane, and reflect them in the axes	

		• 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 • solve number and practical problems that involve all of the above	