**National Curriculum Subject: Mathematics**

**Skills Progression: Geometry**

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|  | **Properties of 2-D shape** | **Properties of 3-D shape** | **Position and Direction** |
| **EYFS****30-50** | I can show awareness of similarities of shapes in the environment.I can show interest in shapes in the environment.I can use shapes appropriately for tasks.I can begin to talk about the shapes of everyday objects, e.g. ‘round’ and ‘tall’. | I can use positional language. I can show an interest in shape and space by playing with shapes or making arrangements with objects.I can show interest in shape by sustained construction activity or by talking about shapes or arrangements. |
| **EYFS****40-60** | I can begin to use mathematical names for ‘solid’ 3D shapes and ‘flat’ 2D shapes, and mathematical terms to describe shapes.I can select a particular named shape.I can use familiar objects and common shapes to create and recreate patterns and build models. | I can describe my relative position such as ‘behind’ or ‘next to’. I can use familiar objects and common shapes to create and recreate patterns and build models. |
| **EYFS****ELG** | I can explore characteristics of everyday objects and shapes and use mathematical language to describe them. | I can recognise, create and describe patterns. |
| **1** | I can explore 2-D shapes [for example, rectangles (including squares), circles and triangles]. | I can explore 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. | I can describe position, direction and movement, including whole, half, quarter and three-quarter turns. |
| **2** | I can identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.I can compare and **sort** common 2-D and 3-D shapes and everyday objects. | I can identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.I can identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid.I can compare and **sort** common 2-D and 3-D shapes and everyday objects. | I can order and arrange combinations of mathematical objects in patterns and sequences.I can 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 anti-clockwise). (Use programming robots). |
| **3** | I can draw 2-D shapes.I can recognise angles as a property of shape or a description of a turn.I can identify right angles, identify whether angles are greater than or less than a right angle.I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines. | I can make 3-D shapes using modelling materials.I can recognise 3-D shapes in different orientations and describe them. | I can recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn. |
| **4** | I can compare and classify geometric shapes, including quadrilaterals and triangles**,** based on their properties and sizes.I can identify acute and obtuse angles and compare and order angles up to two right angles by size.I can identify lines of symmetry in 2-D shapes presented in different orientations.I can complete a simple symmetric figure with respect to a specific line of symmetry. |  | I can describe positions on a 2-D grid as coordinates in the first quadrant.I can describe movements between positions as translations of a given unit to the left/right and up/down.I can plot specified points and draw sides to complete a given polygon. |
| **5** | I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.I can draw given angles, and measure them in degrees (o).I can identify angles at a point and one whole turn (total 360).I can identify angles at a point on a straight line and 1/2a turn (total 180).I can identify other multiples of 90o I can use the properties of rectangles to deduce related facts and find missing lengths and angles.I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.  | I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations. | I can 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. |
| **6** | I can draw 2-D shapes using given dimensions and angles. I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. | I can recognise, describe and build simple 3-D shapes, including making nets. | I can describe positions on the full coordinate grid (all four quadrants).I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes. |