Geometry: Properties of Shapes

|  | IDENTIFYING SHAPES AND THIER PROPERTIES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Select, rotate and manipulate shapes in order to develop spatial reasoning skills. | recognise and name common 2-D and 3-D shapes, including: <br> * 2-D shapes [e.g. rectangles (including squares), circles and triangles] <br> * 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 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) |
| Begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. |  | identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces <br> identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] |  |  |  | illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius |
|  | DRAWING AND CONSTRUCTING |  |  |  |  |  |
|  |  |  | draw 2-D shapes and make 3-D shapes using modelling | complete a simple symmetric figure with respect to a | draw given angles, and measure them in degrees ( ${ }^{\circ}$ ) | draw 2-D shapes using given dimensions and angles |

Geometry: Properties of Shapes

|  |  |  | materials; <br> recognise 3-D <br> shapes in <br> different <br> orientations and <br> describe them | specific line of symmetry |  | recognise, describe and build simple 3-D shapes, including making nets (appears also in Identifying Shapes and Their Properties) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMPARING AND CLASSIFYING |  |  |  |  |  |  |
| EYFS | 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 <br> distinguish between regular and irregular polygons based on reasoning about equal sides and angles | compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons |
| ANGLES |  |  |  |  |  |  |
|  |  |  | recognise angles as a property of shape or a |  | know angles are measured in degrees: estimate and compare |  |

Geometry: Properties of Shapes

|  |  |  | description of a turn |  | acute, obtuse and reflex angles |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | identify right angles, recognise that two right angles make a halfturn, 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: <br> * angles at a point and one whole turn (total $360^{\circ}$ ) <br> * angles at a point on a straight line and $1 / 2 a$ turn (total $180^{\circ}$ ) <br> * other multiples of $90^{\circ}$ | 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 |  |  |  |

