



**Spring Meadow Nursery and Infant School**

**Mathematics scheme of work 2014**

**Block G: Geometry – properties of shapes, position and direction (suggested time – 2 weeks)**

<p>EYFS Shape, space and measures 40 – 60 + months</p>	<ul style="list-style-type: none"> <li>• Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.</li> <li>• Selects a particular named shape.</li> <li>• Can describe their relative position such as 'behind' or 'next to'.</li> <li>• Orders two or three items by length or height.</li> <li>• Orders two items by weight or capacity.</li> <li>• Uses familiar objects and common shapes to create and recreate patterns and build models.</li> <li>• Uses everyday language related to time.</li> <li>• Beginning to use everyday language related to money.</li> <li>• Orders and sequences familiar events.</li> <li>• Measures short periods of time in simple ways.</li> </ul> <p><b>Early Learning Goal – Shape, space and measures</b>  <i>Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.</i></p>
	<p><i>Notes:</i>            Objectives in black show what is relevant to this block            Related parts of the Early Learning Goal are in bold</p>

Year 1	<p><b>Autumn</b></p> <ul style="list-style-type: none"> <li>• recognise and name common 2-D and 3-D shapes, including: <ul style="list-style-type: none"> <li>➤ 2-D shapes [for example, rectangles (including squares), circles and triangles]</li> <li>➤ 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].</li> </ul> </li> <li>• describe positions, direction and movement e.g. left and right, top, middle, bottom, on top of, in front of, behind, above, between etc.</li> </ul> <hr/> <p><b>Spring</b></p> <ul style="list-style-type: none"> <li>• recognise and name common 2-D and 3-D shapes <i>and describe the properties of 2-D shape</i>, including: <ul style="list-style-type: none"> <li>➤ 2-D shapes [for example, rectangles (including squares), circles and triangles]</li> <li>➤ 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].</li> </ul> </li> <li>• describe positions, direction and movement, including <u>whole and half turns</u>.</li> </ul> <hr/> <p><b>Summer</b></p> <ul style="list-style-type: none"> <li>• recognise and name common 2-D and 3-D shapes <i>and describe the properties of 2-D and 3-D shapes</i>, including: <ul style="list-style-type: none"> <li>• 2-D shapes [for example, rectangles (including squares), circles and triangles]</li> <li>• 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].</li> </ul> </li> <li>• describe position, direction and movement, including whole, half, <u>quarter and three-quarter turns</u>.</li> <li>• order and arrange combinations of objects in patterns and sequences (<b>Year 2 objective</b>).</li> </ul>
	<p><i>Notes:</i>  Any underlining indicates progression of the objective from one term to another  Italics indicates optional objectives that are <u>not</u> in the new curriculum but we have kept</p>

Year 2	<p><b>Autumn</b></p> <ul style="list-style-type: none"> <li>• identify and describe the properties of 2-D shapes, including the number of sides and corners</li> <li>• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>• identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</li> <li>• use mathematical vocabulary to describe position, direction and movement, including movement in a straight line distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns</li> </ul> <p><b>Spring</b></p> <ul style="list-style-type: none"> <li>• identify and describe the properties of 2-D shapes, including the number of sides, corners and <u>line symmetry in a vertical line</u></li> <li>• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>• identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</li> <li>• 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 (<u>clockwise and anti-clockwise</u>).</li> </ul> <p><b>Summer</b></p> <ul style="list-style-type: none"> <li>• identify and describe the properties of 2-D shapes, including the number of sides, corners and <u>line symmetry in a vertical line</u></li> <li>• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>• compare and sort common 2-D and 3-D shapes and everyday objects; identifying similarities and therefore families of shapes e.g. quadrilaterals, prisms</li> <li>• 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), <i>left and right</i>.</li> </ul>
	<p><i>Notes:</i>  Any underlining indicates progression of the objective from one term to another  Italics indicates optional objectives that are <u>not</u> in the new curriculum but we have kept</p>

**Block G: Geometry – properties of shapes, position and direction**

Year 3	<p><b>Autumn</b></p> <ul style="list-style-type: none"> <li>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them including identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</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</li> </ul>
	<p><b>Spring</b></p> <ul style="list-style-type: none"> <li>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them including identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> <li>measure the perimeter of simple 2-D shapes</li> <li>recognise angles as a property of shape or a description of a turn</li> <li>identify whether angles are greater than or less than a right angle</li> </ul>
	<p><b>Summer</b></p> <ul style="list-style-type: none"> <li>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them including identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> <li>measure the perimeter of simple 2-D shapes</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> </ul>
	<p><i>Notes:</i> Any underlining indicates progression of the objective from one term to another</p>