| Stage | Summary of key skills and knowledge to be acquired |
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| 4 | - Begins to use the language of size. <br> - Beginning to categorise objects according to properties such as shape or size. <br> - Notice simple shapes and patterns in pictures. <br> - Sorts a range of objects into sets by colour. |
| 5 | - Knows how to categorise objects by properties of shape and size. <br> - Shows an interest in shape and space by playing with shapes or making arrangements with objects. <br> - Uses positional language. <br> - Can accurately categorise objects according to properties such as shape or size. |
| 6 | - Orders two or three items by length, height, weight or capacity <br> - Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. <br> - Can describe their relative position such as 'behind' or 'next to'. <br> - Group objects into sets of 2 |
| 7 | - Pupils use everyday language to talk about size and can indicate the 'Ionger', 'shorter' or 'taller' one. <br> - Begin to measure objects using non-standard units. <br> - Respond to mathematical vocabulary such as straight, circle, larger to describe the shape and size of solids and can explore characteristics of everyday objects. <br> - Groups objects into 5 and record them in a table. <br> - Recognise, describe and create sequences and patterns. |
| 8 | - Begin to measure using standard units of measure and begin to record the length, mass and capacity <br> - Name some common 2D and 3D shapes from a group of shapes or from pictures and describe some of their properties including number of edges, vertices and faces <br> - Describe position, direction and movement including whole, half, quarter and three quarter turns <br> - Groups objects into groups 5 and record them in a table of groups of 5 use tally markings |
| 9 | - Measure and use the appropriate standard units and equipment to estimate and measure mass, capacity and length <br> - Name and describe properties of more advanced 2D and 3D shapes, including number of sides, vertices, edges, faces and lines of symmetry <br> - 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) <br> - Read relevant scales to nearest number units <br> - interpret and construct simple pictograms, tally charts, block diagrams and simple tables and ask and answer simple questions by counting the number in each category |
| 10 | - Measure, compare, add and subtract lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$, mass $(\mathrm{kg}, \mathrm{g}$ ), volume/ capacity ( $1 / \mathrm{ml}$ ) <br> - Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them |


|  | - Identify right angles and whether other angles in shapes are greater or less than a right angle <br> - Identify horizontal, perpendicular and parallel lines in relation to other lines <br> - 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) <br> - interpret and present data using bar charts, pictograms and tables and solve one-step and two step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables. |
| :---: | :---: |
| 11 | - Measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); volume/capacity ( $1 / \mathrm{ml}$ ). <br> - Measure the perimeter of simple 2-D shapes. <br> - Recognise angles as a property of shape or a description of a turn. <br> - 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. <br> - Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. <br> - Interpret and present data using bar charts, pictograms and tables. <br> - Solve one-step and two-step questions [for example, 'How many more?’ and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables. |
| 12 | - Convert between different units of measure [for example, kilometre to metre; hour to minute]. <br> - Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. <br> - Find the area of rectilinear shapes by counting squares. <br> - Identify lines of symmetry in 2-D shapes presented in different orientations. <br> - Consistently Interpret and present data using bar charts, pictograms and tables. |
| 13 | - Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). <br> - Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres ( cm 2 ) and square metres ( m 2 ) and estimate the area of irregular shapes. <br> - Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. <br> - Consistently describe positions on a 2-D grid as coordinates in the first quadrant. <br> - Complete, read and interpret information in tables, including timetables. |
| 14 | - Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places. <br> - Draw 2-D shapes using given dimensions and angles. <br> - Recognise, describe and build simple 3-D shapes, including making nets. |

## Curriculum Area Progression Summary

Area of Learning: Maths - Shape, space and measure

|  | - Interpret and construct pie charts and line graphs and use these to solve |
| :--- | :--- | :--- |
| - problems. |  |
|  | Calculate and interpret the mean as an average. |

