

<u>Maths Progression</u> S<u>hape</u>

Year 3

- draw 2-D shapes
- make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- 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

Year 4

- compare and classify geometric shapes, including quadrilaterals and trianales, based on their properties and sizes
- identify lines of symmetry in 2-D shapes presented in different orientations
- 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 summetru
- 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

Year 6

- properties and sizes
- diameter is twice the radius
- including making nets
- straight line, or are vertically opposite, a angles
- quadrants)
- plane, and reflect them in the axes

EYFS

- Compare quantities using language: 'more than', 'fewer than', Understand position through words alone for example, "The bag is under the table," with no pointing
- Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.
- Select, rotate and manipulate shapes in order to develop spatial reasoning
- Responds to and uses language of position and direction Predicts, moves and rotates objects to fit the space or create the shape they would like
- Uses spatial language, including following and giving directions, using relative terms and describing what they from different viewpoints
- from different viewpoints Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visuali they will look (spatial reasoning) May enjoy making simple maps of familiar and imaginative environments, with landmarks Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using inform mathematical language: sides', 'corners', 'straight', 'flat', 'round'. Select shapes appropriately: flat surfaces for building, a triangle arts. Cambine shapes to make new ones an arch a bigger triangle atc. using informal and
- Combine shapes to make new ones an arch, a bigger triangle, etc.
- Compose and decompose shapes to that children recognise a shape can have other shapes within it, just as numbers
- Chooses items based on their shape which are appropriate for the child's purpose Responds to both informal language and common shape names Shows awareness of shape similarities and differences between objects

- Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes
- Attempts to create arches and enclosures when building, using trial and improvement to select blocks Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes
- Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising
- what they will build. Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper.
- Use informal language like 'pointy', 'spotty', 'blobs', etc. Extend and create ABAB patterns stick, leaf, stick, leaf.
- Notice and correct an error in a repeating pattern.
- Continue, copy and create repeating patterns. Creates their own spatial patterns showing some organisation or regularity
- Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone 'ABC'
- Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next Spots patterns in the environment, beginning to identify the pattern "rule" Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the
- unit of repeat

Year 1

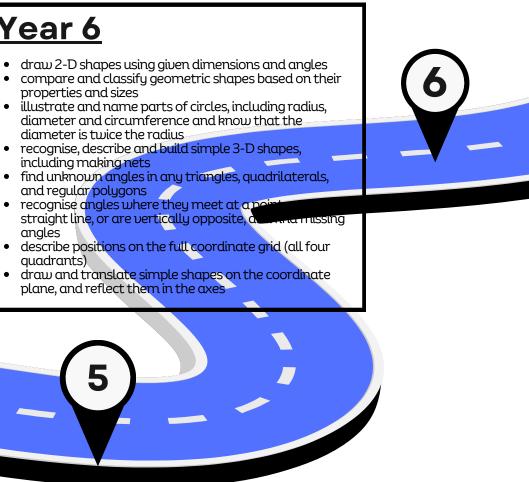
- recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles]
- recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]
- describe position, direction and movement, including whole, half, quarter and three-quarter turns

Year 5

5

- representations
- measure them in degrees

- <u>Yea</u>r 2
- line symmetry in a vertical line
- a triangle on a pyramid]
- pyramids and spheres]



• 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

know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • draw given angles, and

identify: \varnothing angles at a point and one whole turn (total 360°) \varnothing angles at a point on a straight line and a half turn (total 180°) \emptyset other multiples of 90°

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

identify and describe the properties of 2-D shapes, including the number of sides and identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and

compare and sort common 2-D shapes and everyday objects recognise and name common 3-D shapes [for example, cuboids (including cubes),

compare and sort common 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)