Overdale Curriculum – Maths – Shape

Intent

- To develop children's curiosity in Maths and to foster a sense of enjoyment and love of learning about the subject.
- To be aware of Maths in the everyday world.
- To be equipped with the tools and strategies needed to solve Mathematical problems.
- To become confident and competent Mathematicians.

F1	Curriculum	Knowledge	Skills	Vocabulary
	Recognising 2D and 3D shapes and their properties Talk about and explore 2D and 3D shapes (circles, rectangles, triangles and cuboids) using formal and informal mathematical language: side, corners, straight, flat, round. Select shapes appropriately: flat surfaces for building, triangular prism for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc.	 Recognising 2D and 3D shapes and their properties To know what a shape is and can look like. To know that 2D is flat and 3D is not flat. To know how to explore with shapes through building, construction and other areas of the curriculum such as printing in creative provision. To know what the vocabulary of sides, corners, straight, flat and round means and looks like. To know how to select appropriate shapes e.g. a sphere for a snow ball, flat surfaces for building, triangular prism for a roof, etc making links to previous knowledge. To know that shapes can be put together to make a new shape. 	 Recognising 2D and 3D shapes and their properties To be able to talk about 2D and 3D shapes (circles, rectangles, triangles and cuboids). To be able to use formal and informal mathematical language of side, comers, straight, flat, round. To be able to point out sides and corners on a shape. To be able to choose shapes appropriately in play or during a guided task in provision e.g. a sphere for a snow ball, flat surfaces for building, triangular prism for a roof, etc. To be able to combine shapes to make new ones. 	Shape, 2D, 3D, circle, rectangle, triangle, cuboid, side, corner, straight, flat, round, bigger, smaller, build.
F2	Curriculum	Knowledge	Skills	Vocabulary
	Recognising 2D and 3D shapes and their properties Select, rotate, and manipulate shapes to develop spatial reasoning skills. Comparing and classifying. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.	 Recognising 2D and 3D shapes and their properties To know what a shape is and can look like. To know that 2D is flat and 3D is not flat. To know how to explore with shapes through building, construction and other areas of the curriculum such as printing in creative provision. To know what the vocabulary of sides, corners, straight, flat and round means and looks like. To know how to select appropriate shapes e.g. a sphere for a snow ball, flat surfaces for building, triangular prism for a roof, etc making links to previous knowledge. To know that shapes can be put together to make a new shape. To know that rotate means to turn. To know that manipulating shapes is to change them through twisting, turning, moving. Comparing and classifying. 	 Recognising 2D and 3D shapes and their properties To be able to talk about 2D and 3D shapes (circles, rectangles, triangles and cuboids). To be able to use formal and informal mathematical language of side, corners, straight, flat, round. To be able to point out sides and corners on a shape. To be able to choose shapes appropriately in play or during a guided task in provision e.g. a sphere for a snow ball, flat surfaces for building, triangular prism for a roof, etc. To be able to rotate and manipulate shapes developing special reasoning. Comparing and classifying. To be able to combine shapes to make new ones. To be able to compose and decompose shapes. 	Shape, 2D, 3D, circle, rectangle, triangle, cuboid, side, corner, straight, flat, round, bigger, smaller, build, rotate, turn, twist, move, manipulate, parts.



		 To know that shapes can be made by combining other shapes together. To know that shapes can be decomposed into parts and made into different shapes the same as numbers. 	 To be able to show an understanding of shapes having other shapes within them just like numbers can have different parts. 	
Year 1	Curriculum Identifying shapes and their properties. Recognise and name common 2D and 3D shapes including: 2D shapes (rectangles, squares, circles, triangles). 3D shapes (cuboids, cubes, pyramids, spheres).	 Knowledge Identifying shapes and their properties. To know that 2D is flat and 3D is not flat. To know the names of some 2D and 3D shapes. To know how to describe some 2D and 3D shapes using formal and informal language. To be able to recognise and name these 2D shapes: rectangles, squares, circles and triangles. To be able to recognise and name these 3D shapes: cuboids, cubes, pyramids, spheres. To know that corners are formally called vertices. To know what the vocabulary of sides, vertices, straight, flat, curved, and round mean and look like. To know how to select appropriate shapes e.g. a sphere for a snow ball, flat surfaces for building, triangular prism for a roof, etc making links to previous knowledge. To know that shapes can be put together to make a new shape. To know that manipulating shapes is to change them through twisting, turning, moving. 	Skills Identifying shapes and their properties. To be able to recognise and name common 2D shapes: rectangles, squares, circles, triangles. To be able to recognise and name common 3D shapes: cuboids, cubes, pyramids, spheres. To begin to use formal language such as edges, faces, vertices and sides to describe some properties of common 2D and 3D shapes.	Vocabulary Shape, 2D, 3D, circle, rectangle, triangle, cuboid, side, straight, curved, flat, round, bigger, smaller, build, rotate, turn, twist, move, manipulate, parts, vertices, edges, sides, faces.
Year 2	 Curriculum Identifying shapes and their properties. Identify and describe the properties of 2D shapes including the number of sides and lines of symmetry in a vertical line. Identify and describe the properties of 3D shapes including the number of edges, vertices and faces. Identify 2D shapes on the surface of 3D shapes e.g., a circle on a cylinder and a triangle on a pyramid. Comparing and classifying. Compare and sort 2D and 3D shapes and everyday objects. 	 Knowledge Identifying shapes and their properties. To know that 2D is flat and 3D is not flat. To know the names of common 2D and 3D shapes. To know how to describe some 2D and 3D shapes using formal language: vertices, edges, sides, curved, straight, faces, lines of symmetry. To know what symmetry means and looks like. To know what a vertical line looks like (symmetry). To be able to recognise and name these 2D shapes: rectangles, squares, circles and triangles. To recognise and name these 3D shapes: cuboids, cubes, pyramids, spheres. To know that corners are formally called vertices. 	Skills Identifying shapes and their properties. To be able to recognise and name common 2D shapes: rectangles, squares, circles, triangles. To be able to recognise and name common 3D shapes: cuboids, cubes, pyramids, spheres. To use formal language such as edges, faces, vertices and sides to describe properties of common 2D and 3D shapes. To be able to count how many sides, edges, vertices, faces and vertical lines of symmetry a 2D and 3D shape has. To be able to identify 2D shapes on the surface of 3D shapes.	Vocabulary Shape, 2D, 3D, circle, rectangle, triangle, cuboid, side, straight, curved, flat, round, bigger, smaller, build, rotate, turn, twist, move, manipulate, parts, vertices, edges, sides, faces, compare, group, similarities, differences, everyday objects, surface, lines of symmetry, vertical, properties.

	To know how to count how many sides and vertices a 2D	Comparing and classifying.
	 To know how to count how many, edges, faces and vertices a 3D shape has. knowledge of their properties (similarities and differences). 	* * '
	 To know that the faces/surface on a 3D shape looks like some common 2D shapes. A circle on a cylinder. 	 To be able to make links between 2D and 3D shapes with everyday objects.
	 To know how to select appropriate shapes e.g. a sphere for a snow ball, flat surfaces for building, triangular prism for a roof, etc making links to previous knowledge. 	
	 To know that shapes can be put together to make a new shape (spatial reasoning in provision). 	
	Comparing and classifying.	
	 To know that 2D and 3D shapes can be compared using their properties. 	
	 To know that 2D and 3D shapes may have similar properties and can be grouped together in different ways. 	
	To know that 2D and 3D shapes also have differences.	
	 To know that everyday objects can be linked to 2D and 3D shapes such as a rubber being linked to the shape of a cuboid. 	