

Geometric reasoning 2.10		Length of unit: 2 weeks	Week beg:	Year: 2	Teacher:
Success criteria Pupils can identify different possible 3D shapes from seeing one of the faces and describe the properties of the face (2D shape) and the 3D shapes.	Prior Learning: Check that children can already <ul style="list-style-type: none"> • recognise, find and name a half as one of two equal parts of an object, shape or quantity • recognise, find and name a quarter as one of four equal parts of an object, shape or quantity • recognise and name common 2-D and 3-D shapes, including: <ul style="list-style-type: none"> • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] • describe position, direction and movement, including whole, half, quarter and three-quarter turns 			Resources Maths vocabulary book Using and Applying in every maths lesson Assessment through guided maths Think Maths! Pitch and Expectations Y2 Models and Images Overcoming Barriers to learning Level 1 to 2/Level 2 to 3 Securing Level 1/Level 2/Level 3	
Guidance Pupils handle and name a wide variety of common 2D and 3D shapes including; quadrilaterals and polygons, cuboids, prisms and cones, and identify the properties of each shape (for example, number of sides, number of faces). Pupils identify, compare and sort shapes on the basis of their properties and use vocabulary precisely, such as sides, edges, vertices and faces. Pupils should work with patterns of shapes including those in different orientations. Pupils draw lines and shapes using a straight edge. Pupils should work with patterns of shapes including those in different orientations.					

Learning objectives

Pupils should be taught to:

Geometry: properties of shape

- identify and describe the properties of 2D shapes, including the number of sides and line 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
- compare and sort common 2D and 3D shapes and everyday objects

Geometry: position and direction

- order and arrange combinations of mathematical objects in patterns and sequences
- use mathematical vocabulary to describe position, direction and movement

Pupil outcomes:

I can identify a square face on a 3D shape and suggest different shapes it could be (for example a cube, a cuboid, a square based pyramid) and shapes it could not be (for example a cylinder, a sphere) and explain why.