Geometric Reasoning 3.4	Length of unit: **2 weeks**	Week beg:	Year: 3	Teacher:

Success criteria

Pupils can explain and show angle as a measure of turn and can draw, make and identify shapes with right angles.

Prior Learning:

- recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity
- write simple fractions for example ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.
- identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- compare and sort common 2-D and 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

Resources

Maths vocabulary book

Using and Applying in every maths lesson

Assessment through guided maths

Think Maths!

Pitch and Expectations Y3

Models and Images

Overcoming Barriers to Learning L2 to L3/L3 to L4

Securing Level 3/Level 4

Guidance

Pupils' knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygons and polyhedra. They should be able to describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.

Learning objectives	**Pupil outcomes:**
Pupils should be taught to: Geometry: properties of shape ● draw 2D shapes and make 3D shapes using modeling materials ● recognise 3D shapes in different orientations and describe them ● recognise that angles are 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	I can draw a 2D shape which has two right angles and explain how I know whether the other angles are greater than or less than a right angle. I can construct a 3D shape which has right angles and explain how I know they are right angles.