

Geometric reasoning 3.9	Length of unit: 2 weeks	Week beg:	Year: 3	Teacher:
<p>Success criteria</p> <p>Pupils can recognise and identify horizontal and vertical lines and pairs of perpendicular and parallel lines and justify their thinking. They can identify acute, obtuse and right angles in the context of 2D shape and justify their thinking.</p>	<p>Prior Learning:</p> <p>Check that children can already;</p> <ul style="list-style-type: none"> • recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity • write simple fractions for example $\frac{1}{2}$ of 6 5 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ • 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 angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) 		<p>Resources</p> <p>Maths vocabulary book</p> <p>Using and Applying in every maths lesson</p> <p>Assessment through guided maths</p> <p>Think Maths!</p> <p>Pitch and Expectations Y3</p> <p>Overcoming Barriers to Learning – L2 to 3 and L3 to 4</p> <p>Securing Level 3 and Securing Level 4 documents</p>	
<p>Guidance</p> <p>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.</p>				

Learning objectives

Pupils should be taught to:

Geometry: properties of shapes

- draw 2-D shapes, and make 3-D shapes using modeling materials; 3-D 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.
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

Pupil outcomes:

I can follow instructions to draw a particular right-angled trapezium.

I can find four examples of pairs of perpendicular lines and parallel lines in the school and explain what is the same and what is different about them.