Bollin Primary School

Geometry: Position and Direction

National Centre for Excellence in the Teaching of Mathematics

POSITION, DIRECTION AND MOVEMENT							
Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
begin to describe a sequence of events, real or fictional, using words such as 'first', 'then…'.	begin to describe a sequence of events, real or fictional, using words such as 'first', 'then…'.	describe position, direction and movement, including half, quarter and three-quarter turns.	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)		describe positions on a 2-D grid as coordinates in the first quadrant	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	describe positions on the full coordinate grid (all four quadrants)
understand position through words alone – for example, "The bag is under the table." – with no pointing.	understand position through words alone – for example, "The bag is under the table." – with no pointing.				describe movements between positions as translations of a given unit to the left/right and up/down		draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
discuss routes and location, using words like 'in front of' and 'behind'.	discuss routes and location, using words like 'in front of' and 'behind'.				plot specified points and draw sides to complete a given polygon		
PATTERN							
Talk about and identify the patterns around them. For example: stripes on clothes, designs of rugs and wallpaper.	Talk about and identify the patterns around them. For example: stripes on clothes, designs of rugs and wallpaper.		order and arrange combinations of mathematical objects in patterns and sequences				
Use informal language like 'pointy', 'spotty', 'blobs' etc.	Use informal language like 'pointy', 'spotty', 'blobs' etc.						
Extend and create ABAB patterns – stick, leaf, stick, leaf.	Extend and create ABAB patterns – stick, leaf, stick, leaf.						
notice and correct an error in a repeating pattern.	notice and correct an error in a repeating pattern.						
	continue repeating patterns.						
	copy and create repeating patterns.						