Geometry: Position and Direction

National Centre for Excellence in the Teaching of Mathematics

POSITION, DIRECTION AND MOVEMENT								
Pre FS1	FS2	FS3	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	understand position through words alone – for example "The bag is under the table," – with no pointing		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)
	describe a familiar route discuss routes and locations, using words like 'in front of' and 'behind'					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.
						plot specified points and draw sides to complete a given polygon		
PATTERN								
notice patterns and arrange	talk about and identify the patterns	continue, copy and create		order and arrange combinations of mathematical				

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things in patterns	around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. extend and create ABAB patterns – stick, leaf, stick, leaf notice and correct an error in a repeating pattern	repeating patterns		objects in patterns and sequences				