Primary Mathematics Curriculum

Spatial awareness and location

	Stage 1 (Junior & Senior Infants)	Stage 2 (1st & 2nd Class)	Stage 3 (3rd & 4th Class)	Stage 4 (5th & 6th Class)	
	Through appropriately playful and engaging learning experiences, children should be able to				
Learning Outcomes	develop a sense of spatial awareness in relation to their bodies and the immediate environment. describe the spatial features of objects and their relative position in space.	use spatial knowledge for the purposes of orientation and navigation. visualise and model location using symbolic co-ordinates.	describe, interpret and record directional instructions and location. compare and classify angles, recognising them as a property of a shape and as a description of a turn.	describe location on the full co-ordinate plane. interpret scale maps and create simple scale drawings.	
Mathematical concepts	Everyday language can be used to describe the relative position and direction of objects and people (to other objects and people).	More formal language can help us describe position and direction more precisely, e.g., the language of the compass points.	Directions and locations can be described with increasing precision, using more formal measures of distance and direction (60 km east) and simple grid reference co-ordinates (A6).	An exact location on a map can be described and found using co-ordinates.	
	Position can be viewed from various vantage points.	The location of objects can be portrayed on a map, with/without a grid system.	 There are different ways to think about angles, including: angles as the corners of 2-D shapes angles as a measure of turn. 	Distances on maps and some plans can be determined using a scale.	
	Non-standard units can be useful to give more accurate directions for movement.	A grid system of horizontal and vertical lines, labelled with letters and numbers, can be laid over a map and used to identify locations.	There are 360 degrees in a full turn. The extent of a turn is measured in degrees. Half of a full turn (180 degrees) and quarter of a full turn (90 degrees) are used to classify angles.	The relationship between angle measures and compass co-ordinates can be used to plot direction accurately.	
	Simple maps and/ or drawings can be used to track the movement of objects.	When drawing maps of locations, it is necessary to think about the relative size and position of key features.	Approximate distances can be calculated by considering the distance represented by each cell of the grid.	The co-ordinate plane has a horizontal x-axis and a vertical y-axis. Co-ordinates identify the location of a point. They consist of pairs of numbers, which indicates the distance along the x-axis and the y-axis respectively.	