EYFS progression map from birth to the end of Reception year

Area of Learning Mathematics Shape, Space and Measures

Concept:

Shape and Space

Mathematically, the areas of shape and space are about developing visualising skills and understanding relationships, such as the effects of movement and combining shapes together, rather than just knowing vocabulary. Spatial skills are important for understanding other areas of maths and children need structured experiences to ensure they develop these. Here, the focus is on actively exploring spatial relations and the properties of shapes, in order to develop mathematical thinking (rather than on shape classification, which requires prior knowledge of properties). This section is concerned with developing the two aspects of spatial awareness and shape awareness, with some progression identified within each.

Typical progression within this concept →		Developing spatial awareness: experiencing different viewpoints	Shape awareness: developing shape awareness through construction	Representing spatial relationships	Identifying similarities between shapes	Showing awareness of properties of shape	Describing properties of shape	Developing an awareness of relationships between shapes
Progression steps to enable typical progression within this concept ↓	**Birth – 3**	I can select shapes which will fit when rotated or flipped in insert boards, shape sorters and jigsaws I can engage in exploratory play with shapes.		I can use gesture and limited talk (e.g. 'there') to indicate the position of something that has been asked for.				
	3-4 yrs	I can ride trikes around different routes to get to the same end point I can direct a friend around an obstacle course using spatial vocabulary. I can take part in various construction activities I can print and making pictures and patterns with shapes I can select shapes appropriately e.g. flat surfaces for building, a triangular prism shape for a roof etc. I can combine shapes to make new ones e.g. An arch or a bigger triangle		I can respond to the use of everyday positional language e.g. I put my bag under my chair, I put my lunchbox in my bag etc. I can use everyday positional language in my day to day talk.	I know the names of the 2D shapes circle, square, rectangle and triangle. I can give simple explanations about why I have chosen a particular shape or object using everyday language for its properties e.g. I needed something flat for teddy to lie on.			
	Reception	I can make a complete circuit with a train track I can direct a simple robot or remote-controlled toy vehicle along a route I can see things from other viewpoints. E.g. With toys in a line 'Can you say what the teddy on the other side is seeing?'		I can respond to more specific positional language correctly. I can describe the position of things using more specific positional language.	I can select, rotate and manipulate 2D and 3D shapes, construction materials as well as found objects to fulfil a particular need e.g. choosing flat faced 3D shapes to build a tower, selecting the correct shapes and orienting them correctly to complete a complex 2D or 3D shape picture I know the names of the 3D shapes cube, sphere, square based pyramid, triangular based pyramid, cuboid and triangular prism. I know the properties of the 4 basic 2D shapes. I know the properties of the 3D shapes.			I can spot shapes within shapes. I can investigate how shapes can be combined to create different shapes.