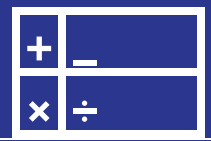
Mathematics in Foundation Stage



The EYFS framework is structured very differently to the National Curriculum as it is organised across seven areas of learning and development rather than subject areas. This document shows how the skills taught across EYFS feed into National Curriculum subjects. This document demonstrates which statements from the 2020 Development Matters are prerequisite skills for Mathematics within the National Curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS Statutory Framework and the Development Matters age ranges for Three and Four Year-Olds and Foundation Stage to match the programme of study for Mathematics.

Areas of Learning and Development		Three and Four Year Olds	Foundation Stage	Early Learning Goals
		Mathematical Vocabulary		
	Communication and Language	• Use a wider range of vocabulary. • Understand 'why' questions, like: "why do you think the caterpillar is so fat?"	• Learn new vocabulary. • Use new vocabulary throughout the day.	**Speaking** • Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.
		Number and Place Value		
		Counting		
	Mathematics	• Recite numbers past 5. • Say one number name for each item in order: 1, 2, 3, 4, 5. • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').	• Count objects, actions and sounds. • Count beyond ten.	**Numerical Patterns** • Verbally count beyond 20, recognising the pattern of the counting system.

	Identifying, Representing and Estimating Numbers			
	Mathematics	• Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Show 'finger numbers' up to 5. • Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.	• Subitise. • Link the number symbol (numeral) with its cardinal number value.	**<u>Number</u>** • Subitise (recognising quantities without counting) up to 5.
	Reading and Writing Numbers			
	Mathematics	• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.	• Link the number symbol (numeral) with its cardinal number value.	
	Compare and Order Numbers			

	Mathematics	• Compare quantities using language: 'more than', 'fewer than'.	• Compare numbers.	**<u>Numerical Patterns</u>** • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.

	Understanding Place Value			
	Mathematics		• Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 10.	**<u>Number</u>** • Have a deep understanding of numbers to 10, including the composition of each number.
	Solve Problems			
	Mathematics	• Solve real world mathematical problems with numbers up to 5.		
	Number and Place Value			
	Counting			

	Mathematics	• Recite numbers past 5. • Say one number name for each item in order: 1, 2, 3, 4, 5. • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').	• Count objects, actions and sounds. • Count beyond ten.	**<u>Numerical Patterns</u>** • Verbally count beyond 20, recognising the pattern of the counting system.
	Identifying, Representing and Estimating Numbers			
	Mathematics	• Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Show 'finger numbers' up to 5.	• Subitise • Link the number symbol (numeral) with its cardinal number value.	**<u>Number</u>** • Subitise (recognising quantities without counting) up to 5.

		• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.		
	Reading and Writing Numbers			

	Mathematics	• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.	• Link the number symbol (numeral) with its cardinal number value.	
	Compare and Order Numbers			
	Mathematics	• Compare quantities using language: 'more than', 'fewer than'.	• Compare numbers.	**Numerical Patterns** • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
	Understanding Place Value			
	Mathematics		• Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 10.	**Number** • Have a deep understanding of numbers to 10, including the composition of each number.

	Solve Problems			
	Mathematics	• Solve real world mathematical problems with numbers up to 5.		

	Addition and Subtraction			
	Mental Calculations			
	Mathematics		• Automatically recall number bonds for numbers 0-5 and some to 10.	**Number** • Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
	Solve Problems			
	Mathematics	**Numerical Patterns**		• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.
	Measurement			
	Describe, Measure, Compare and Solve (All Strands)			
	Mathematics	• Make comparisons between • objects relating to size, length, capacity.	Compare length, weight and capacity. weight and	
	Telling the Time			
	Mathematics	• Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then…		

	Properties of Shapes			
	Recognise 2D and 3D Shapes and their Properties			
	Mathematics	• Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. • Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. • Combine shapes to make new ones – an arch, a bigger triangle, etc.	• Select, rotate and manipulate shapes in order to develop spatial reasoning skills.	
	Compare and Classify Shapes			
	Mathematics		• Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.	

	Position and Direction			
	Position, Direction and Movement			
	Mathematics	• Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route.		
		• Discuss routes and locations, using words like 'in front of' and 'behind'.		
	Understanding the World		• Draw information from a simple map.	
	Patterns			
	Mathematics	• Talk about and identify the 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.	• Continue, copy and create repeating patterns.	
	Statistics			

	Record, Present and Interpret Data			
	Mathematics	• Experiment with their own symbols and marks, as well as numerals.		