

## Maths Knowledge and Skills Progression in the EYFS

Mathematical Vocabulary	
3-4 year olds	Use a wider range of vocabulary. Understand 'why' questions, like: "why do you think the caterpillar is soft?"
Reception	Learn new mathematical vocabulary throughout the day. Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary

Number and Place Value	
Counting	
3-4 year olds	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')
Reception	Count objects, actions and sounds. Count beyond ten. ELG Mathematics Numerical Patterns Verbally count beyond 20, recognising the pattern of the counting system.
Identifying, Representing and Estimating Numbers	
3-4 year olds	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.
Reception	Subitise Link the number symbol (numeral) with its cardinal number value Subitise (recognising quantities without counting) up to 5

<b>Reading and Writing Numbers</b>	
3-4 year olds	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
Reception	Link the number symbol (numeral) with its cardinal number value.
<b>Compare and Order Numbers</b>	
3-4 year olds	Compare quantities using language: 'more than', 'fewer than' Creates their own spatial patterns showing some organisation or regularity
Reception	Compare numbers Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
<b>Understanding Place Value</b>	
Reception	Understand the 'one more than/one less than' relationship between consecutive numbers Explore the composition of numbers to 10. Have a deep understanding of numbers to 10, including the composition of each number
<b>Solve problems</b>	
3-4 year olds	Solve real world mathematical problems with numbers up to 5.

<b>Addition and Subtraction</b>	
<b>Mental Calculations</b>	
Reception	Automatically recall number bonds for numbers 0-5 and some to 10. 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.
<b>Solve problems</b>	
Reception	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly

<b>Measurement</b>	
<b>Measure and compare</b>	
3-4 year olds	Make comparisons between objects relating to size, length, weight and capacity.
Reception	Compare length, weight and capacity
<b>Telling the time</b>	
Reception	Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then...

<b>Properties of Shapes</b>	
<b>Recognise 2D and 3D Shapes and their Properties</b>	
3-4 year olds	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
Reception	Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
<b>Compare and classify shapes</b>	
Reception	Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can

<b>Position and Direction</b>	
<b>Position, Direction and Movement</b>	
3-4 year olds	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'.
Reception	Draw information from a simple map.
<b>Patterns</b>	
3-4 year olds	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.
Reception	Continue, copy and create repeating patterns.

<b>Statistics</b>	
<b>Record, present and interpret data</b>	
3-4 year olds	Experiment with their own symbols and marks, as well as numerals