

**At the end of Reception children who are at the expected level of development will:**

Early Learning Goal (from September 2021)	Sequences in Reception ESSENTIALmaths		Skills covered within learning sequence
Number ELG: Have a deep understanding of number to 10, including the composition of each number	RLS10	Regrouping the Whole	Developing a deeper understanding that numbers are made up of other numbers and beginning to rehearse number bonds
	RLS11	Regrouping parts to find the total (the whole)	Combining parts to make a whole and using the part, whole model to develop an understanding of addition
	RLS12	Finding the whole and missing parts	Explores what to do when something is missing; initially the whole but moving on to working out a missing part. Different types of problems will be used to teach different strategies.
Number ELG: Subitise (recognise quantities without counting) up to 5.	RLS1	Subitising (including equivalence, more and less) Subitising is then reinforced through most future sequences.	Subitising numbers up to 5; recognising the amount without counting. Recognising numbers to 5 and linking names to their values
Number ELG: Automatically recall (without reference to rhymes, counting or other aides) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.	RLS11	Regrouping parts to find the total (the whole)	See above
	RLS12	Finding the whole and missing parts	See above
	RLS14	Doubling and Halving	Exploring doubling and halving, including solving problems involving doubling and halving
Early Learning Goal (from September 2021)	Sequences in Reception ESSENTIALmaths		Skills covered within learning sequence
Numerical Patterns ELG: Verbally count beyond 20, recognising the pattern of the counting system.	RLS2	Counting Skills (stable order and one to one correspondence)	Counting reliably, using number names in order and one to one correspondence
	RLS6	Counting the Sort (including cardinality)	Counting a set of items accurately, saying how many are in the set and comparing this to the amount in other sets
	RLS13	Ten and Some More	Understanding values to 20 (focusing on the numbers 10 – 20) by creating the unit of 10, for comparison and finding one more and one less than a number
	RLS16	Counting Beyond 20	Counting beyond 20, recognising the pattern of the counting system, exploring the value of tens and ones in numbers
Numerical Patterns ELG: Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as another quantity.	RLS3	Comparison – Measures	Comparing objects by length, thickness and weight/mass, using appropriate language to describe and order them
	RLS5	Classification	Classifying (grouping) objects using given criteria and their own ideas and comparing the groups after classification
	RLS7	Using Counting to Compare	Using counting to compare and finding a precise numerical difference in sets of objects in varied contexts
	RLS8	Spatial thinking	Developing spatial thinking and spatial language linked to position and direction, in movements and using symbols
	RLS9	Magnitude – Ordering and Estimating	Knowing the position of numbers 0-10 and the relationship to other numbers, such as 0, 5 or 10
Numerical Patterns ELG: Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.	RLS4	Pattern Recognition	Noticing, describing and extending patterns, including thinking about what part is the repeating unit
	RLS14	Doubling and Halving	Exploring doubling and halving, including solving problems involving doubling and halving
	RLS15	Odd and Even	Understanding that numbers are either odd or even, looking at their ‘composition’ and whether they share fairly into two groups

In the majority of cases each learning sequence we have indicated a match to a single Early Learning Goal. However, that does not mean that other learning sequences will not also support the children's development towards these goals as well. Some learning sequences will not necessarily provide specific evidence for the Early Learning Goal but they are developing concepts, skills and knowledge that are an essential part of the child's journey towards achieving the related goal.

RLS8 is such an example where spatial thinking is essential for learning about direction, patterns geometry as well as route finding and mathematical relationships that lead to an understanding of order and comparison.

The learning sequences such as this are essential stepping stones to achieving the linked Early Learning Goal and provides a curriculum that includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures, as stated in the statutory educational programme for mathematics.

## Development Matters and ELG Overview Curriculum Grid for Mathematics

	Mathematics	
	Number	Numerical Patterns
Birth to 3	Combine objects like stacking blocks and cups. Put objects inside others and take them out again. Take part in finger rhymes with numbers. React to changes of amount in a group of up to three items. Compare amounts, saying 'lots', 'more' or 'same'. Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence. Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.' Climb and squeezing selves into different types of spaces. Build with a range of resources. Complete inset puzzles. Compare sizes, weights etc. using gesture and language - 'bigger/little/smaller', 'high/low', 'tall', 'heavy'. Notice patterns and arrange things in patterns.	
Nursery	Fast recognition of up to 3 objects, without having to count them individually ('subitising'). Recite numbers past 5. Say one number 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'). 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. Solve real world mathematical problems with numbers up to 5. Compare quantities using language: 'more than', 'fewer than'.	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'. 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'. Make comparisons between objects relating to size, length, weight and capacity. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. Combine shapes to make new ones – an arch, a bigger triangle etc. Talk about and identifies 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. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'
Reception	Count objects, actions and sounds. Subitise. Link the number symbol (numeral) with its cardinal number value. Count beyond ten. Compare numbers. Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10. Automatically recall number bonds for numbers 0–10.  <b>Number ELG</b> Have a deep understanding of number to 10, including the composition of each number; Subitise (recognise quantities without counting) up to 5; 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.	Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. Continue, copy and create repeating patterns. Compare length, weight and capacity.  <b>Numerical Patterns ELG</b> Verbally count beyond 20, recognising the pattern of the counting system; Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.