## Early Years Outcomes for Maths

## Nursery: 3 and 4 year olds:

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: Children in 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.
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.
Early Learning Goals: Number
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.
Early Learning Goals: Numerical Patterns
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.

| Nursery Cycle 1 Maths | 2023-2024 |  |
| :---: | :---: | :---: |
| Autumn | Spring | Summer |
| Begin to count objects that can be moved <br> Begin to recite numbers in order <br> Comparing objects e.g. size <br> Begin to use positional language <br> Begin to talk about and identify patterns <br> 2D Shapes - Developing vocabulary and language | Counting objects that can be moved <br> Begin to link numbers to amounts <br> Reciting numbers in order <br> Comparing objects e.g. size, capacity, weight and length <br> Develop positional language <br> Talk about and identify patterns <br> 2D and 3D Shapes - Developing vocabulary and language <br> Using shapes appropriately in construction <br> Introduction to subitising | Counting objects <br> Link numbers to amounts up to 5 <br> Reciting numbers in order up to 5 <br> Comparing objects e.g. size, capacity, weight and length <br> Using positional language <br> To extend and create a pattern <br> 2D and 3D Shapes - Developing vocabulary and language <br> Using shapes appropriately in construction <br> To begin to count by subitising |


| Reception Cycle 1 Maths 2023-2024 |  |  |
| :---: | :---: | :---: |
| Autumn | Spring | Summer |
| Introduction to subitising numbers up to 5; recognising the amount without counting. <br> Introduction to counting reliably, using number names in order and one to one correspondence <br> Classifying (grouping) objects using given criteria and their own ideas and thinking about the groups after classification. <br> Introduction to comparing objects by direct comparison using nonstandard units. <br> Introduction to noticing, describing and extending patterns, including thinking about what part is the repeating unit. <br> Introduction to constructing and building with 2D and 3D shapes. | Developing subitising numbers up to <br> 5; recognising the amount without counting. <br> Developing counting reliably, using number names in order and one to one correspondence <br> Counting a set of items accurately, saying how many are in the set and comparing this to the amount in other sets <br> Using counting to compare and finding a precise numerical difference in sets of objects in varied contexts <br> Using counting to compare and finding a precise numerical difference in sets of objects in varied contexts <br> Introduction to combining parts to make a whole and using the part, whole model to develop an understanding of addition <br> Introduction to exploring what to do when something is missing in a part, whole model; making links to subtraction and finding the difference <br> Developing comparing objects by length, thickness and weight/mass, using appropriate language to describe and order them using nonstandard units. <br> Development of identifying, describing and extending patterns, including thinking about what part is the repeating unit <br> Developing spatial thinking and spatial language linked to position and direction, in movements and using symbols <br> To begin to recognise and name 2D and 3D shape. | Subitising within 10; recognising the amount without counting. <br> Counting reliably, using number names in order and one to one correspondence <br> Counting confidently to 20 , focusing on the numbers $10-20$, <br> and finding one more and one less than a number <br> Counting beyond 20 , recognising the pattern of the counting system, exploring the value of tens and ones in numbers <br> Developing combining parts to make a whole and using the part, whole model to develop an understanding of addition <br> Developing exploring what to do when something is missing in a part, whole model; making links to subtraction and finding the difference <br> Exploring doubling and halving, including solving problems involving doubling and halving <br> Understanding that numbers are either odd or even, looking at their 'shape' and whether they share fairly into two groups <br> Comparing objects by length, thickness and weight/mass, using appropriate language to describe and order them using non-standard units. Introduce standard units. <br> Identify, describe and extend patterns, including thinking about what part is the repeating unit <br> Using spatial thinking and spatial language linked to position and direction, in movements and using symbols. <br> To identify and discuss the properties of 2D and 3D shapes. |

