



Nursery Early Maths

Maths	
Development Matters (DfE 2021) & Some Birth to 5 Matters	
SPECIFIC AREA	Nursery 3 & 4 Year Olds
Number	<ul style="list-style-type: none"> • Fast recognition of up to 3 objects (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 is how many they are • Show finger numbers up to 5 • Link numerals to amounts - showing the right number of objects for the number up to 5 • Experiment with their own symbols, marks and numerals • Solve real life mathematical problems with numbers up to 5 • Recognise numbers up to 5 and be able to order them • Be able to add and subtract within 5. • To use number language within play • Separate a group of up to 5 objects in differing ways.
Numerical Patterns (Shape & Measures)	<ul style="list-style-type: none"> • To be able to compare quantities using language: 'more than', 'fewer than' • Talk about and explore 2D and 3D shapes (for example circles, rectangles, triangles and cubes) use informal and mathematical language: sides, corners, straight, flat, round. • 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. • Understand position through words alone - for example the bag is under the table - with no pointing • Describe a familiar trail • Discuss routes and locations using words like in front of and behind • Make comparisons between objects relating to size, length, weight and capacity. • Talk about and identifies the patterns around them. For example stripes on clothes, designs on rugs and wall paper. Use informal language like pointy, spotty, blobs. • 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 and fictional using words such as first, then



Progression of knowledge & skills

Area	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
<u>Maths</u>	Number Rhymes, Songs, Counting by Rote, Counting Objects, Using Number Language in Play & Making Marks Continuous & Daily					
<u>Number</u>	To recite numbers to 5 in order. Count 1 object, show 1 finger, give 1 object	To recite numbers to 5 in order. Count 2 objects, show 2 fingers, give 2 objects	To recite numbers past 5. Count 1 & 2 objects and introduce the numerals 1 & 2	Reciting numbers past 5. Count 3,4,5 objects & be able to represent this. Introduce numerals 3,4,5 To subitise to 2	To be able to count up to 10 To subitise up to 3 To recognise numbers 1,2,3,4,5 and order them	Subitising 4&5 Experimenting writing numbers Real life word problems
<u>Numerical Patterns, Shape & Measure</u>	Making models & pictures with 2D shapes	Making models & pictures with 3D shapes. Begin to understand position using pointing/words	Begin to use mathematical language - names of 2d shapes - circle, square. Begin to understand position using words alone - on top, under, in, next to Talk about patterns in the environment & nature - stripes/dots etc	Properties of 2D shapes/names. Use vocabulary such as more, less, bigger, smaller Sequence - first, then, next - fictional or real.	Names/properties of 2D and some 3D shapes. Selecting shapes appropriately to make models/buildings Describe a familiar trail - forwards/backwards ABAB patterns with variety of resources	Combine shapes to make new ones Describe a familiar trail - in front of, behind, next to Patterns correcting errors.

Vocabulary & comparison in height, weight and capacity will be continuous and visible throughout the children's play.



Long Term Overview

Nursery Maths

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Continuous throughout the year - number rhymes/songs, number stories, counting by rote, counting objects, number language and vocabulary.					
Number Rhymes with props Number Stories Counting by rote 1-5 Counting by rote to 5 with actions Colour matching & sorting Introduce number 1 Finding 1 item and showing 1 finger Introduce number 2 Finding 2 items and showing 2 fingers To match quantity to number 2D Shapes be able to recognise and name basic shapes - circle, square, rectangle & square.	Number Rhymes Number Stories Counting by rote to 5 Counting by rote to 5 with actions Recap numbers 1 & 2 Introduce number 3 Finding three things/items Focus on how we make two and three Use a fives frame Counting small quantities up to 5 & know that the last number is how many in the group. Compare quantities using language 'more than' & 'fewer than' To understand the terms empty, full and half empty relating to capacity.	Number Rhymes Number Stories Counting by rote to 10 Counting by rote to 10 with actions. Counting small quantities Recap number recognition of 1,2,3 Focus on what makes on the differing ways of making 1,2,3 Introduce number 4, counting 4 items and ways of making 4. To find the total by counting all objects in two groups. Recognition of 2D shapes Making models with 3D shapes. Patterns - repeating patterns ABABAB	Number Rhymes Number Stories Counting by rote to 10 Counting by rote to 10 with actions. To subitise objects up to 2. Begin to count larger quantities To be able to discuss locations such as in front of, behind, next to, through, over, under when describing a trail etc. Introduce Number 5 - how to make 5 - separating 5 in differing ways, matching 5 objects to 5. Counting out 5 objects. +/- signs making the sums Bringing in other numbers 1-4.	Number Rhymes Number Stories Counting by rote to 10 Counting by rote to 10 with actions. To continue to count larger quantities Simple problem-solving sums - the farmer has 2 sheep his friend brings him two more how many altogether. Begin to write down/record. Working with numbers within 5 to take away small amounts. Be able to order numbers 1-5 To be able to describe a sequence of events using first& then. Order familiar things. Talk about our day first we get up then we	Number Rhymes Number Stories Counting by rote to 10 Counting by rote to 10 with actions. To do some simple number sentences with addition and subtraction. Some simple problem solving. To be able to count out a larger quantity from a group up to 6 & be able to subitise to at least 3 if not beyond. Focus on how we make 1, 2,3,4 and 5.



	<p>To begin to look at patterns in the environment use informal language such as pointy, stripy, blobs.</p> <p>To begin to understand position such as under, on, in,</p>	<p>To begin to subtract a number from a small quantity.</p>	<p>Mathematical Language more & fewer?</p> <p>To focus on the words Heaviest/lightest.</p> <p>Which is heavier?</p> <p>Ordering items. Using simple scales to find what is heavier than a stone etc.</p> <p>Patterns ABABAB - making patterns in the outdoors with natural resources.</p> <p>To explore 2d & 3d shapes - focus on properties as well as names - sides, corners, straight, flat, round.</p>	<p>have breakfast then nursery etc.</p> <p>To be able to describe a familiar trail use words such as in front of or behind link to the Bear Hunt Story.</p>	
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Nursery Assessment Check Points

Early Maths

Starting Point 1 - Children Entering Nursery at Age 3

Children will

- Know a few number songs
- Enjoy listening to number stories
- Be able to count with some numbers sequenced correctly
- Be able to say their age 'I am 3'
- Be able to complete simple inset puzzles
- Be able to recognise 'big' and 'small'

Check Point 1 - Mid Nursery - This will vary for each child

Children will

- Use some number names & number language in play
- Be able to recite numbers up to at least 5 in order
- Be able to count up to 3 objects one to one and when taken from a larger group
- Be able to sing some counting rhymes with confidence
- Be able to recognise the numbers 1 & 2
- Be able to represent the above numbers with items/objects
- Have an awareness of shape & patterns in the environment
- Make pictures or build models/construct with 2d and 3d shapes
- Be able to understand the terms under, on & in
- Be able to identify items that are long & short, heavy & light and full & empty
- Be able to complete jigsaw puzzles with more pieces

Starting Point 2 - Exit Nursery/Entry to Reception

Children will

- Be able to recognise numbers 1-5
- Be able to order numbers 1 to 5
- Be beginning to say how to make 2,3,4 & 5
- Be able to say how many altogether when combining two groups
- Be able take away objects from a group and say how many are left



- Be able to subitise to 3
- Be able to recite numbers to 10
- Be able to count small quantities and recognise that the last number reached is the overall amount
- Experiment with their own symbols, marks or numerals
- Be able to talk about and explore simple 2d shapes and use mathematical language to describe them
- Make comparisons between objects in relation to size, length, weight & capacity
- Discuss locations such as in front of, behind, next to, through when describing a trail
- Be able to continue an ABAB pattern
- Be beginning to sequence events first, next

Checkpoint 2 - Mid Reception

Children will

- Be able to recognise numbers to 8 and represent these numbers in different ways
- Be able to order numbers 1-8
- Be able to subitise to 5
- Have an awareness of odd and even numbers to 8
- Be able to talk about the composition of numbers to 5
- Be able to recite numbers beyond 10
- Be able to write numbers to 8
- Be able to name simple 2D and 3D shapes
- Compare length, weight and capacity and order objects accordingly
- Be able to recognise and make ABC patterns

Readiness for Year 1

Children who are ready for year one will

- Have a deep understanding of numbers to 10 and can represent them in differing ways
- To begin to recognise patterns within the number system
- Subitise, compare quantities and recall number bonds to 5
- Recognises and name simple 2D and 3D shapes
- Compares the length, weight and capacity of 3 objects