Nursery Maths Progression Document

This document outlines the objectives met from Birth to 5 and Development Matters for Master the Curriculum's nursery maths scheme.

Master the Curriculum's nursery maths scheme includes a nursery rhyme each week and hands on practical maths lessons designed to keep your 3 – 4 year olds engaged and making progress. Editable planning, printables and continuous provision ideas included.

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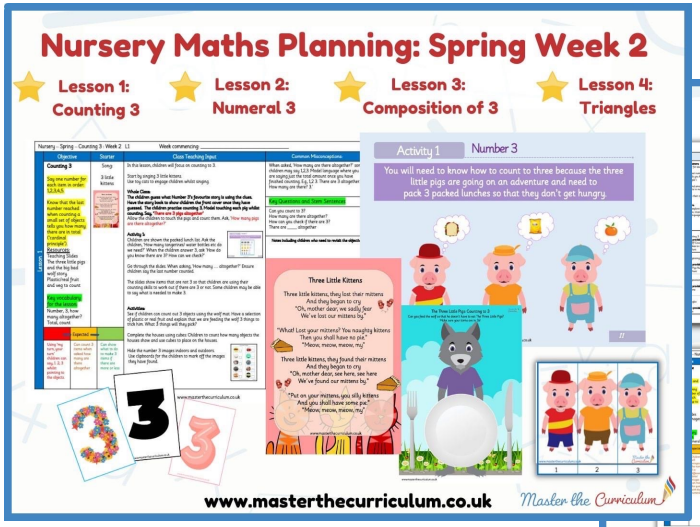

Term 1: Nursery Progression

Week	Objectives	Development Matters	Birth to 5 Matters
1	**Recognise the colour red** Children identify red objects and say if an object is red or not.	**EAD 3 – 4 Year Olds:** Explore colour and colour mixing	**EAD Range 4:** Enjoys and responds to playing with colour in a variety of ways, for example combining colours **EAD Range 5:** Continues to explore colours and how colours can be changed.
	Recognise the colour blue Children identify blue objects and say if an object is blue or not.		
	Recognise the colour yellow Children identify yellow objects and say if an object is yellow or not.		
2	**Recognise the colour green** Children identify green objects and say if an object is green or not.		
	Recognise the colour purple Children identify purple objects and say if an object is purple or not.		
	Recognise colours Children recap the colours they have already learnt and explore other colours. They talk about their favourite colours and match objects to the correct colour name.		
3	**Recognise matching buttons** Children identify a button that is the same shape or colour as a set of buttons on a shirt.	**3 – 4 Year Olds:** Make comparisons between objects relating to size Complete inset puzzles Compare sizes using gestures and language: 'bigger/little/small' Talk about and explore 2D shapes using informal and mathematical language sides, corners, straight, flat	**Range 4:** Recognises that two objects have the same shape **Range 5:** Shows awareness of shape similarities and differences between objects. **Range 6:** Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes
	Recognise matching shoes Children pair up shoes that match because they are the same colour or have the same shape on them.		
	Recognise and create matching towers Children match up towers of blocks that are made up of the same colours in the same order.		
4	**Match number shapes** Children identify matching Numicon shapes and begin to identify how they have the same number of holes.		
	Match the same size Children match up handprints that are the same size or colour.		
	Match prints Children match prints that are the same shape, even though they might be different colours.		
5	**Sort by size** Children sort objects, like counting bears, by creating groups of objects that are the same size.	**3 – 4 Year Olds:** Make comparisons between objects relating to size Complete inset puzzles Compare sizes using gestures and language: 'bigger/little/small'	**Range 4:** Recognises that two objects have the same shape **Range 5:** Shows awareness of shape similarities and differences between objects. **Range 6:** Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes
	Sort by colour Children sort objects that are 2 or 3 different colours.		
	Sort by shape Children sort objects, like buttons, by creating groups of objects that are the same shape.		
6	**Sorting – What do you notice?** Children talk about what the notice about the objects that have been grouped by an adult.		
	Sorting – Guess My Rule Children are asked to identify how groups of objects have been sorted by identifying the similarities between the objects. They then sort objects based on their own criteria.		

Term 2: Nursery Progression

Week	Objectives	Development Matters	Birth to 5 Matters
1	Number 1 –Subitising Children learn to recognise when there is 1 object in a set and how to show 1 on their fingers.	**3 – 4 Year Olds:** Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). 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 Show 'finger numbers' up to 5. **Reception** Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5	**Range 4:** Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Begin to recognise numerals 0 to 10 Subitises one, two and three objects (without counting) Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) Links numerals with amounts up to 5 and maybe beyond Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers
	Number 1 – Counting Children practise counting 1 object by touching them and saying '1'.		
	Number 1 – Numeral Matching Children are introduced to the numeral 1 and match the numeral to amounts that show 1.		
2	Number 2 – Subitising Dice Patterns Children will learn to recognise 2 dots, like they see on a dice, without counting them.		
	Number 2 – Subitising Different Patterns Children will continue to recognise 2 objects without counting, this time in different arrangements.		
	Number 2 – Subitising Different Sizes and Patterns Children will learn to recognise when there are 2 dots, even if they are different sizes.		
3	Number 2 – Counting – Say One Number for Each Item Children practise counting 2 objects by touching them or pointing to them as they '1…2'.		
	Number 2 – Link Numeral and Amounts Children are introduced to the numeral 2 and link the numeral to amounts that show 2.		
	Number 2 – Link Numeral and Amounts Children look at different fonts and images of number 2 and match them to the correct amount.		
4	Colour AB Patterns Children describe AB patterns from 2 different colours and predict what will come next in the pattern.	**3 – 4 Year Olds:** Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern.	**Range 4:** Creates their own spatial patterns showing some organisation or regularity Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC) Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next
	Extend AB Patterns – Outdoor Objects Children explore creating, describing and continuing AB patterns with natural objects.		
	Extend AB Patterns – Movement In this lesson, children will continue AB patterns using movement of their body.		
5	Fix My Pattern (AB Patterns) Children describe ABC patterns made from 3 different colours and predict what will come next.		
	Extend ABC Colour Patterns Children sort objects that are 2 or 3 different colours.		
	Outdoor ABC Patterns Children explore creating, describing and continuing ABC patterns with natural objects.		
6	Consolidation – Sorting and Matching		
	Consolidation - Counting		
	Consolidation - Pattern		

Term 3: Nursery Progression

Week	Objectives	Development Matters	Birth to 5 Matters
1	Subitising 3 - Dice Patterns Children will learn to recognise 3 dots, like they see on a die, without counting them.	**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	**Range 4:** Subitises one, two and three objects (without counting)
	Subitising 3 –Different Patterns Children will continue to recognise 3 objects without counting them, this time in different arrangements.		
	Subitising 3 Children will learn to recognise when there are 3 dots, even if they are different sizes.		
2	Counting 3 Children focus on counting 3 objects.	**3 – 4 Year Olds:** 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'). 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. 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'	**Range 4:** Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Begin to recognise numerals 0 to 10 Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) Links numerals with amounts up to 5 and maybe beyond • Explores using a range of their own marks and signs to which they ascribe mathematical meanings Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same Responds to both informal language and common shape names
	Numeral 3 Children are introduced to what the numeral 3 looks like and learn what it represents.		
	Composition of 3 Children are introduced to the idea that numbers are made up of smaller numbers and they will begin to explore what smaller numbers the number 3 is composed of.		
	Recognise triangles Children learn that triangles are 2-D shapes that have 3 sides. They are asked to identify triangles by counting their sides.		
3	Counting 4 Children focus on counting 4 objects.		
	Numeral 4 Children are introduced to what the numeral 4 looks like and match the numeral 4 to the quantity.		
	Recognise squares and rectangles Children learn that squares and rectangles are 2-D shapes that have 4 sides. They are asked to identify them by counting their sides.		
4	Composition of 4 Children will continue to explore how numbers are composed of smaller numbers. In this lesson, they will explore what numbers make up the number 4, by moving frogs between a log and a pond.		
	Composition of 4 Children will continue to explore how numbers are composed of smaller numbers. In this lesson, they will explore what numbers make up the number 4, by moving frogs exploring spots on a ladybird.		
	Composition of 4 Children will continue to explore how numbers are composed of smaller numbers. In this lesson, they will explore what numbers make up the number 4, by throwing 4 beanbags at a hoop.		
5	Counting 5 Children focus on counting 5 objects.		
	Numeral 5 Children are introduced to what the numeral 5 looks like and match the numeral 5 to the quantity.		
	Recognise pentagons Children learn that pentagons are 2-D shapes that have 5 sides. They are asked to identify them by counting their sides.		
6	Composition of 5 Children explore the composition of number 5 using Numicon pieces to make a shell for Sammy the Snail.		
	Composition of 5 Children explore fitting pieces of Numicon inside a number 5 'house' shape.		
	Composition of 5 Children explore the composition of 5 by arranging red and blue spots on a rocket.		

Term 4: Nursery Progression

Week	Objectives	Development Matters	Birth to 5 Matters
1	Consolidation – Subitising Subitise counters on a 5 frame and objects arranged in dice patterns. Then, show the matching amount on your fingers.	**3 – 4 Year Olds:** Recite numbers past 5. Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.	**Range 4:** May enjoy counting verbally as far as they can go. Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Uses some number names and number language within play, and may show fascination with large numbers. Begin to recognise numerals 0 to 10. Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle). Links numerals with amounts up to 5 and maybe beyond.
	Consolidation – Counting Count the toys in Crocodiles toybox		
	Consolidation – Numerals Children see the numerals in different contexts and identify which number they represent.		
2	Counting 6 Children practise counting 6 objects with 1:1 correspondence.		
	Counting 6 Children continue to practise counting 6 objects with 1:1 correspondence, in the context of pennies.		
	Counting 6 – Ten Frame Children are introduced to a ten frame and learn how 6 objects can be arranged on a ten frame.		
3	Tall and Short Children compare the height of different objects using the word tall or short.	**3 – 4 Year Olds** Make comparisons between objects relating to size, length, weight and capacity.	**Range 4** Explores differences in size, length, weight and capacity. In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items.
	Long or Short Children compare the length of different objects using the word long or short.		
	Tall / Long or Short Children compare the height or length of different objects using the words long or tall and short.		
4	Mass – Introducing Balance Scales Children are introduced to balance scales. They explore what happens when they put different objects in them. They hear the words heavier and lighter.		
	Mass - Lighter Children use the balance scales to investigate which objects are lighter.		
	Mass – Heavier or Lighter Children use the balance scales again but this time they say which object is heavier and which is lighter.		
5	Capacity – Full or Empty Children explore containers that are full or empty, both practically and pictorially.		
	Capacity – Nearly Full or Nearly Empty Children explore containers that are nearly full or nearly empty.		
	Capacity – Comparing Containers Children compare the capacity of different containers by directly pouring from one to the other.		
6	Consolidation – Length Children say which objects are longer or taller and shorter.		
	Consolidation – Mass Children say which objects are heavier and which are lighter.		
	Consolidation – Capacity Children compare the capacity of different containers.		

Term 5: Nursery Progression	Week	Objectives	Development Matters	Birth to 5 Matters
	1	Sequencing Children sequence pictures from a nursery rhyme.	**3 – 4 Year Olds:** Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then…'	**Range 4:** Recalls a sequence of events in everyday life and stories.
		Sequencing Children sequence pictures from their daily routine.		
		Sequencing Children sequence pictures from a familiar story.		
	2	Position – On and Under Children place an object on or under a chair, a table etc.	**3 – 4 Year Olds:** Understand position through words alone for example, "The bag is under the table," with no pointing.	**Range 4:** Responds to and uses language of position and direction.
		Position – In and Out Children explore whether an object is in or out of a basket, bag etc.		
		Position – In Front or Behind Children explore whether the gingerbread man is in front of or behind different animals		
	3	Comparing Groups – More Than Children look at two sets of objects and say which set has more.	**3 – 4 Year Olds:** Compare quantities using language: 'more than', 'fewer than'.	**Range 4:** Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same!
		Comparing Groups – Fewer Than Children look at two sets of objects and say which set has fewer.		
		Comparing Groups – More Than and Fewer Than Children look at two sets of objects and identify which set has more and which set has fewer.		
	4	2-D Shapes - Circles Children learn to identify circles and they begin to learn some properties of a circle.	**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'	**Range 4** Responds to both informal language and common shape names. Shows awareness of shape similarities and differences between objects
		2-D Shapes – Triangles Children learn to recognise triangles and begin to learn some of the properties of a triangle.		
		2-D Shapes - Rectangles Children learn to recognise rectangles. They learn that a square is a special rectangle. They learn some of the properties of a rectangle.		
	5	3-D Shapes – Cubes and Cuboids Children identify cubes and cuboids and begin to talk about some of their properties.		
		3-D Shapes - Cylinders Children learn to recognise cylinders and begin to talk about some of their properties.		
		3-D Shapes - Spheres Children learn to recognise spheres and begin to talk about some of their properties.		
	6	Consolidation – Sequencing Children put familiar events in the correct order.		
		Consolidation - Position Children recap the vocabulary on, under, in, out, in front of and behind.		
		Consolidation – More or Fewer Children compare two sets of objects and say which has more and which has fewer.		

Term 6: Nursery Progression

Week	Objectives	Development Matters	Birth to 5 Matters
1	Composition of 3 Children explore the different pairs of numbers that make up number 3.	**3 – 4 Year Olds:** Explore the composition of numbers to 10.	**Range 4:** Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers Beginning to use understanding of number to solve practical problems in play and meaningful activities Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same
	Composition of 4 Children explore the different pairs of numbers that make up number 4.		
	Number Composition Children recap the different pairs of numbers that make up 3, 4 or 5.		
2	What Comes After? Children explore jumping along the number line to find what comes after.	**3 – 4 Year Olds:** Recite numbers past 5.	**Range 4:** May enjoy counting verbally as far as they can go.
	What Comes After? Children count along the number track and fill in the missing number by identifying the number that comes after the numbers they know.		
	What Comes After? Children sequence numerals to 5 by identifying what comes after each number.		
3	What Comes Before? Children jump back along a number track to find the number that comes before a given number.		
	What Comes Before? Children identify the missing number on a number track by identifying what number comes before a given number.		
	What Comes Before? Children sequence numerals by counting backwards along a number line and identifying what comes before.		
4	Numbers to 5 Children count how many objects there are in a set and identify if there are enough of each object for everyone.	**3 – 4 Year Olds:** Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle') Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 Solve real-world mathematical problems with numbers up to 5	**Range 4** Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) Links numerals with amounts up to 5 and maybe beyond.
	Numbers to 5 Children work out what number is represented by different counting cards and then sequence them.		
	Numbers to 5 Children complete mazes by working their way through the numerals in the correct order.		
5	Consolidation – Shape Patterns Children describe patterns made up of 2-D and 3-D shapes.		
	Consolidation – More or Fewer Children identify which has more and which has fewer out of two sets of objects.		
6	Consolidation – What Comes Before or After? Children use a number line to help them identify what comes before or after a given number up to 5.		
	Consolidation – Composition Children explore the composition of number 5, through the song '5 Green Bottles'.		