



Reception Long Term Plan : OUR MATHEMATICS MILESTONES

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
General Themes	All about me!	Celebrations	To Infinity and Beyond!	The Land Before Time	How does your Garden Grow?	All Around the World
Mathematics: <ul style="list-style-type: none"> Number Numerical Patterns 	<ul style="list-style-type: none"> To show finger numbers up to 5 To link numerals to amounts up to 5 To count objects, actions and sounds To reliably count a quantity up to 10 To say how many there are after counting, knowing that the last number in the count indicates the total number in a group To compare quantities and numbers using language 'more than' 'less than' 'fewer' 'the same as' to compare collections (up to 10 objects) To talk about 2D shapes To select shapes appropriately To combine shapes to make new ones To create and extend simple patterns To order items by size, capacity and weight using non-standard measures, correctly using the terms: longest, shortest, heaviest, lightest 	<ul style="list-style-type: none"> To subitise numbers 0-5. To count forwards and backwards from 5 To count beyond 10 To find '1 more' from a given number within 10 To understand the composition of numbers 2,3,4 To partition sets of up to 5 objects using a part-part whole model To understand that addition is the combining of sets of objects To know which pairs make a given number within 4 To automatically recall double facts 1+1, 2+2 To write numbers 0-5 To know about the different ways we can pay for things To begin to use positional vocabulary 'in between' 'over' 'above' 'beneath' 'beside' To describe a familiar route using directional language To know different times of the day, days of the week and months of the year 	<ul style="list-style-type: none"> To understand the value of zero To recognise up to 5 objects without having to count them individually To understand that all numbers are made up of smaller numbers To explore composition of numbers to 8 To subitise to 8 To add by combining two amounts To find 1 more and 1 less from a given number and is beginning to understand the '1 more than/1 less than' relationship between sequential numbers To double numbers To compare mass using a balance To order three items by capacity using appropriate language Orders and sequences events using everyday language related to time 	<ul style="list-style-type: none"> To order height and length using appropriate language To link the number symbol with its cardinal value – to 10 To understand that subtraction is removing objects To subitise 5 objects To explore the composition of numbers to 10 To recall number bonds to 5 To say, with some accuracy, how many there might be, before counting (sets up to 10) To recognise that the faces on a 3D shape often comprise of 2D shapes To explore and describes how many corners and sides 2D shapes have To identify and describe a pentagon, a hexagon and an octagon To make models, selecting blocks needed and visualising what they will build To create and extend more complex patterns 	<ul style="list-style-type: none"> To build and identify numbers to 20 and beyond. To count forwards and backwards To count on and back to solve problems Create number stories using ten frames To follow and give directions To turn and flips objects in order to make shapes fit and create models; predicting and visualising how they will look To subitise up to 5 (ELG) To have a deep understanding of number to 10, including the composition of each number (ELG) To compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity (ELG) 	<ul style="list-style-type: none"> To double numbers to 10 To share amounts fairly and recognise when they are not the same To explore odd and even numbers To find half of a number To use a range of nonstandard To pay for items using 1p, 5p and 10p coins To tell the time to the o'clock and half past the hour To automatically recall number bonds up to 5 and some number bonds to 10, including double facts (ELG) To verbally count beyond 20, recognising the pattern of the counting system (ELG) To explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally (ELG)
Checkpoints	<ul style="list-style-type: none"> To subitise to 5 To talk about different ways amounts of 5 can be made To count objects accurately to 10 To recognise when amounts are the same, more than or less than To recognise and order numbers to 10 To use some shape names and positional language To create a repeated shape and colour pattern 		<ul style="list-style-type: none"> To subitise to 8 To talk about the different ways that numbers to 5 can be made and begin to apply this knowledge to numbers to 10 Links subtraction facts to composition of numbers to 5 Recalls some doubles to 10 Can count beyond 10 Uses mathematical language to compare and talk about shape and size 		<ul style="list-style-type: none"> Can children confidently demonstrate the ELG skills? 	



Reception Long Term Plan : OUR MATHEMATICS LEARNING ACTIVITIES

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Mathematics EP	<p>Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.</p>					
<ul style="list-style-type: none"> Number Numerical Patterns 	<p>X2 weeks: baseline/getting to know you</p> <ul style="list-style-type: none"> Matching Sorting Comparing amounts Compare size/mass/capacity Exploring simple patterns 	<ul style="list-style-type: none"> Finding amounts of 123 Subitise 123 Represent amounts 123 Find one more than 123 Find one less than 123 Explore the composition of 123 Identify and name circles and triangles Compare circles and triangles Look for shapes in the environment Describe position Recognise amounts of 4 and 5 Subitise 4 and 5 Represent amounts of 4 and 5 Find one more than 4, 5 Find one less than 4,5 Composition of 4 and 5 Identify and name shapes with 4 sides Combine shapes with 4 sides Shapes in the environment Day and night 	<ul style="list-style-type: none"> Introduce zero Find 0-5 Subitise 0-5 Represent 0-5 Find one more Find one less Composition of amounts to 5 Conceptual subitising to 5 Compare mass Use a balance Explore capacity Compare capacities Recognise amounts of 678 Represent 678 Find one more than 678 Find one less than 678 Composition of 678 Making pairs - odd and even amounts Doubles to 8 Combine two groups (addition) Conceptual subitising to 8 	<ul style="list-style-type: none"> Explore length Compare length Explore height Compare height Talk about time Order and sequence time Find amounts fo 9, 10 Compare numbers to 10 Represent 9, 10 Conceptual subitising to 10 Find one more Find one less Composition to 10 Number bonds Make arrangements of 10 Doubles to 10 Explore odd and even Recognise 3D shapes Find 2D shapes within 3D shapes Use 3D shapes 3D shapes in the environment Patterns in the environment Copy and continue patterns 	<ul style="list-style-type: none"> Build numbers beyond 10 Continue patterns beyond 10 Verbal counting beyond 10 Addition Subtraction Selecting shapes Rotating shapes Manipulate shapes Shape arrangements Compose shapes Decompose shapes Copy 2D shape pictures Find 2D shapes within 3D shapes 	<ul style="list-style-type: none"> Sharing amounts Grouping amounts Even and odd sharing Building doubles Repeating patterns Create pattern rules Explore pattern rules Replicate and buld Visualise from different positions Descirbe positions Giving instructions Exploring mapping Representing maps with models Creating maps from places Creating maps from stories Consolidation