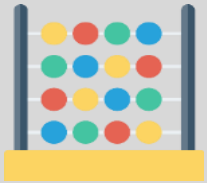
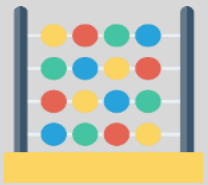
Reception Long Term Plan : OUR MATHEMATICS MILESTONES

	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: • Number • Numerical Patterns 	• 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 & 3D shapes • To select shapes appropriately • To combine shapes to make new ones • To create and extend simple patterns • To order three items by length and weight using non-standard measures, correctly using the terms: longest, shortest, heaviest, lightest	• 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	• 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 height and capacity using appropriate language • Orders and sequences events using everyday language related to time	• To link the number symbol with its cardinal value – to 10 • To count forwards and backwards from 10 • To understand that subtraction is removing objects • To explore the composition of numbers to 10 • To recall number bonds to 5 • To know about the different ways we can pay for things • 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	• To build and identify numbers to 20 and beyond. • To partition numbers into tens and ones • 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 indifferent contexts, recognising when one quantity is greater than, less than or the same as the other quantity (ELG)	• 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	• 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		• 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		• Can children confidently demonstrate the ELG skills?	

Reception Long Term Plan : OUR MATHEMATICS LEARNING ACTIVITIES

	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 EP	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.					
• Number • Numerical Patterns 	X2 weeks: baseline/getting to know you Matching Sorting Comparing amounts Compare size/mass/capacity Exploring patterns	Representing 1,2,3 by finding a corresponding picture card Numicon piece or spots on a dice. Alphablocks videos 1,2 and 3. Finding one more and less Understanding the composition of 1,2,3 and that numbers are made up of smaller numbers, Discovering about circles and triangles, their properties, hunting for them and recreating them using different media Showing spatial awareness through positional language and representing real places through maps and drawings. The number 4 and 5 Further understand one more one less, using songs like Five Little Speckled Frogs. Recognising shapes with 4 sides Combining shapes Understanding daily routines, day, afternoon etc; and using language like before, after, tomorrow and today.	Zero and comparing numbers to 5 Composition of 4 and 5 Mass and capacity Learning about 6,7 and 8 Pairs and combining groups to 10 Alphablocks 4, 5, 6, 7, 8 Length and height	9 and 10 Comparing numbers to 10 Number bonds to 10 (2 weeks) 3D shape Consolidation (respond to what they need more support with)	Building numbers beyond 10 Counting patterns/spatial reasoning Adding more x2 weeks Taking away x2 weeks	Doubles Sharing and grouping Odd and Even Spatial reasoning Deepening understanding x2 weeks Patterns Consolidation