Reception Long-Term Plan September 2021

Emily Matthews and Katie Manderville

Curriculum Area	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Literacy: **Mathematics** **(number)**	Introduce numbers 1,2,3,4,5 and 0 Recite number names in order from 1-10 Links numeral to quantity with numbers up to 5 **Aut 1 Counting animals** Compare quantities of objects in different contexts, recognising when one is greater, less/fewer or equal. Say if it is a little bit/lot more or less. Begins to realise that as we count up, the numbers are 'more and more', and as we count back/down they are 'less and less'. Begins to notice what happens to a quantity of objects if one is added or taken away. **Aut 2 Little Robin Red Vest book of losing one vest a day; count down to Christmas with advent calendar** Begins to order numerals to 5. Counts up to 5 then 10 objects, saying number names in order, matching one number to each item. Say how many there are altogether, appreciating that the last number of the count indicates the total. Begins to explore different ways of counting reliably, such as laying pebbles along a 5 frame as way of seeing the total. Begins to count a small amount of items in an irregular arrangement. Begins to count out a smaller number from a larger group (such as taking 3 plates off the shelf for the three puppets). Begins to say if they have too many or not enough. Begins to estimate the total before counting when working with numbers up to 5.		Introduce numbers 6,7,8,9,10 Recite number names in order up to 20 Links numeral to quantity with numbers 10 and beyond. Compare quantities of objects in different contexts, recognising when one is greater, less or equal. Say if it is a little bit/lot more or less. Use the vocabulary of 'more, less/fewer, equal'. Knows that as we count up, the numbers are 'more and more', and as we count back/down they are 'less and less'. Begins to understand the 'one more/less than' relationship between consecutive numbers. Can find 'one more or less/fewer than' using objects. Begins to know the effect of adding and subtracting. Can order numerals 1-5 or more. Explores patterns within numbers up to 10, such as finding doubles and beginning to explore odd and even numbers. Counts 10 or more objects, saying number names in order, matching one number to each item. Say how many there are altogether, appreciating that the last number of the count indicates the total. Begins to count things that cannot be moved, including actions and sounds. Explores different ways of counting reliably, such as laying pebbles along a tens frame as a way of seeing the total. Counts a small amount of items in an irregular arrangement. Begins to count out a smaller number from a larger group (such as taking 8 cars out of the full car box). Can say if they have accidentally taken too many or not enough and may attempt to adjust the total. Estimates the total before counting when working with numbers up to 10.		Continue to explore numbers 0-10 in more depth Recite number names in order beyond 20 Links numeral to quantity with numbers 10 and beyond. Compare quantities of objects, and more abstract quantities, in different contexts, recognising when one is greater, less or equal. Say if it is a little bit/ lot more or less. Use the vocabulary of 'more, less/fewer, equal'. Knows that as numbers go up the number track they are 'more and more', and as they come down the track they are 'less and less', just like when we count. Understands the 'one more/less than' relationship between consecutive numbers. Can say one more or less/fewer than a number up to 10 and sometimes beyond. Knows the effect of adding or taking away. Can order numerals from 0-10 and possibly beyond. Explores patterns within numbers up to 10 and beyond, such as recalling doubles and saying whether a number is odd or even, and counting in 2s. Recognise the pattern of the counting system teens, twenties, thirties etc. Begin to count in 10s, recognising the value of these numbers. Shows an interest in larger numbers. Counts 10 or more objects, saying number names in order, matching one number to each item. Say how many there are altogether, appreciating that the last number of the count indicates the total. Begins to count things that cannot be moved, including actions and sounds. Explores different ways of counting reliably, such as laying pebbles along a 100 square as a way of seeing the total. Counts items in an irregular arrangement. Counts out a smaller number from a larger group (such as taking 8 cars out of the full car box). Use knowledge of the value of numbers and 1:1 counting skills to adjust the quantity if they have taken too few or too many. Estimates the total before counting when working with numbers up to 10 and beyond.	

Begins to notice that even if a group of objects is re-arranged or separated into different groups, the total remains the same. Explores cutting items in half (such as piece of paper or play dough cup cake). Begins to recognise '0' as 'Zero/nothing' and understands it's value in relation to numbers 0-10. Talks about quantities and numbers in their play, using everyday language. an talk about whether two things are 'the same'. For example, same shape, size, colour, quantity, numeral.	Knows that even if a group of objects is re-arranged or separated into different groups, the total remains the same. Begins to explore how small quantities can be halved. Recognises '0' as 'Zero/nothing' and understands its value in relation to numbers 0-10. Begins to use some addition and subtraction vocabulary in practical activities. Begins to recognise the symbol = and refer to it as 'equal/equals' and know that this means 'The same as'. Compare items and quantities, saying whether they are 'equal'.	Knows that even if a group of objects is re-arranged or separated into different groups, the total remains the same. Explores how quantities can be halved. Recognises '0' as 'Zero/nothing' and understands it's value in relation to numbers 0-10. Begins to notice how it appears in larger numbers. Uses some addition and subtraction vocabulary in practical activities. Use the term and symbol 'equals' as a way of beginning to show an explain their knowledge of numbers. For example, "Three and seven are equal to ten and so are eight and two". "Double four is equal to eight". "Let's share out the puppets so we have an equal amount each".
May attempt to write some familiar numerals in their play. Begins to record their mathematical thinking using pictures or other marks. Explores and finds the number bonds of numbers up to 5, using a range of practical objects, such penguins 'on the ice or in the water'. Subitise up to 3 with the help of 5/10s frames, dice, fingers, and other pattern resources. Explore how a quantity of objects can be divided up in different ways. For example, dividing toy food into 1+1+1+1, then 2+2, then 1+1+2, then 3+1 Can show a quantity up to 5 on their fingers.	Begins to form numerals 0-9. Chooses ways to represent their mathematical thoughts and solutions to problems with informal mark-making. Can recall the number bonds of numbers up to 5. Is beginning to explore and find the number bonds of numbers up to 10. Uses some practical ways to find and represent these, for example, part/whole model hoops, or dolls upstairs and downstairs in a house. Subitise up to 5 with the help of 5/10s frames, dice, fingers, and other pattern resources. Partition numbers into more than two groups, and explore how to divide into equal groups. Can show a quantity up to 10 on their fingers.	Will form recognisable numerals 0-9. Chooses ways to represent their mathematical thoughts and solutions to problems with informal mark-making and some standard notation (+ =). Knows the composition of each number, recalling number bonds to 5 and some up to 10. Represents these in part/whole models, and solves problems related to this. For example, "The spider is showing 6 of its legs…How many is it hiding?" Subitise up to 5 and sometimes beyond with the help of 5/10s frames, dice, fingers, and other pattern resources. And using knowledge of number bonds, for example, "I can see that there are three and three and I know that makes 6" Solves practical addition and subtraction problems using counting, and knowledge of the composition of numbers. Partition numbers into more than two groups, and explore how to divide into equal groups. Can use their fingers to quickly show a quantity and may use fingers to explore partitioning, such as finding the different ways of holding up 6 fingers.