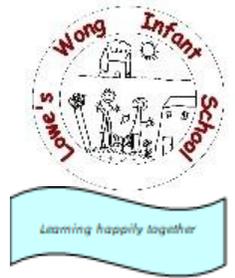


Lowe's Wong Infant School

Mastering Number Progression Document



	Foundation 2	Year 1	Year 2
Term 1	<p>Know how to identify when a set can be subitised and when counting is needed</p> <p>Know how to subitise different arrangements, both unstructured and structured, including using the Hungarian number frame</p> <p>Know how to make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills Know how to spot smaller numbers 'hiding' inside larger numbers</p> <p>Know how to connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers</p> <p>Know how to hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number</p> <p>Know that the last number in the count tells us 'how many' (cardinality)</p>	<p>Know how to subitise within 5, including when using a rekenrek, and re-cap the composition of 5</p> <p>Know how to use their understanding of the numbers 6 to 9 using the '5 and a bit' structure</p> <p>Know how to compare numbers within 10 and use precise mathematical language when doing so</p> <p>Know that the numbers to ten have an order and connect this to '1 more' and '1 less' than a given number</p> <p>Know that the structure of even numbers can be composed by doubling any number, and can be composed of 2s</p> <p>Know that the structure of odd numbers is composed of 2s and 1 more</p> <p>Know that the numbers 6, 8, and 10 can be composed of smaller numbers Know that number tracks and number lines have differences</p>	<p>Know how to describe the composition of the numbers 6 to 9 in terms of '5 and a bit'</p> <p>Know how to compare numbers using the language of comparison and use the symbols $<$ $>$ $=$</p> <p>Know how to recognise and describe the structure of even numbers (including exploring how even numbers can be composed of two odd parts or two even parts) and the composition of each of 6, 8 and 10</p> <p>Know how to recognise and describe the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part) and the composition of each of 7 and 9</p> <p>Know that the numbers 10 and 20 can be described as '10 and a bit'</p> <p>Know that the number system to 20 is linear and know how to reason about midpoints</p>

	<p>Know how to be accurate in counting</p> <p>Know that each thing must be counted once and once only and in any order</p> <p>Know that anything can be counted, including actions and sounds</p> <p>Know how to compare sets of objects by matching</p> <p>Know how to use the language of 'whole' when talking about objects which have parts</p>		
<p>Term 2</p>	<p>Know how to subitise numbers within and beyond 5, and increasingly connect quantities to numerals</p> <p>Know how to identify missing parts for numbers within 5</p> <p>Know that the numbers 6 and 7 have structures such as '5 and a bit' and connect this to finger patterns and the Hungarian number frame</p> <p>Know how to identify equal and unequal groups when comparing numbers</p> <p>Know that two equal groups can be called a 'double' and connect this to finger patterns</p> <p>Know how to sort odd and even numbers according to their 'shape'</p> <p>Know that there is a counting sequence and link cardinality and ordinality through the 'staircase' pattern</p>	<p>Know that the numbers 7 and 9 are composed of smaller numbers</p> <p>Know how to recognise the composition of odd and even numbers, seeing that even numbers can be made of two odd or two even parts, and that odd numbers can be composed of one odd part and one even part</p> <p>Know how to identify the number that is two more or two less than a given odd or even number, identifying that two more/ less than an odd number is the next/ previous odd number, and two more/ less than an even number is the next/ previous even number</p> <p>Know how to recognise the aggregation and partitioning structures of addition and subtraction through systematically partitioning and re-combining numbers within 10 and connecting this to the part-part-whole diagram, including using the language of parts and wholes</p> <p>Know that the structures of addition and reduction can be shown by using number</p>	<p>Know that the numbers 6 to 9 can be doubled using the '5 and a bit' and '10 and a bit' structure</p> <p>Know how to use doubles to calculate near doubles</p> <p>Know how to use bonds of 10 to reason about bonds of 20, in which the given addend is greater than 10</p> <p>Know how to use known number bonds within 10 to calculate within 20, working within the 10-boundary</p> <p>Know how to use their knowledge of bonds of 10 to find three addends that sum to 10</p> <p>Know how to use their knowledge of the composition of numbers within 20 to add and subtract across the 10-boundary</p> <p>Know how to use their understanding of the linear number system to 10 to position multiples of 10 on a 0 - 100 number line and reason about midpoints</p>

	<p>Know how to order numbers and play track games</p> <p>Know how to join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers</p>	<p>stories, including introducing the 'first, then, now' language structure</p>	
Term 3	<p>Know how to count larger sets as well as counting actions and sounds</p> <p>Know that there is a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame</p> <p>Know how to compare quantities and numbers, including sets of objects which have different attributes</p> <p>Know that there is a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2</p> <p>Know how to generalise about 'one more than' and 'one less than' numbers within 10</p> <p>Know how to identify when sets can be subitised and when counting is necessary</p> <p>Know how to use a Rekenrek to develop conceptual subitising skills</p>	<p>Know that the numbers 11 to 19 can be partitioned as '10 and a bit' and compare numbers within 20</p> <p>Know how to connect the composition of the numbers 11 to 19 to their position in the linear number system, including identifying the midpoints of 5, 10 and 15</p> <p>Know how to compare numbers within 20</p> <p>Know that addition and subtraction equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction)</p>	<p>Know how to explore a range of strategies to subtract across the 10-boundary</p> <p>Know how to recognise bonds of 20 in which the given addend is greater than 10, and know how to reason about bonds of 20, in which the given addend is less than 10</p> <p>Know how to use previously explored strategies to support their reasoning about inequalities and equations</p> <p>Know how to recognise doubles and near doubles</p> <p>know how to transform additions in which two addends are adjacent odd/ even numbers into doubles</p>