



Progression in Number and Place Value



Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary							
1:1 counting subitise	count how many more less same different more fewer greater than more than less than even odd	equal to more than less than fewer most least	place holder tens ones digit partition greater than less than	tens ones hundreds multiple estimate	negative Positive thousands round integer	powers	degree of accuracy interval
Counting							
Recite numbers past 5. Say one number for each item in order: 1,2,3,4,5. <i>Counting throughout the session. E.g. group time- number of children, counting the number of children before coming back inside etc.</i> Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').	Verbally count beyond 20, recognising the pattern of the counting system. <i>Verbally count from 1-20 and beyond.</i> <i>Recognising the pattern of the counting system.</i>	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 100 in numerals count in multiples of twos, fives and tens Given a number, identify one more and one less	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward	Count from 0 in multiples of 4, 8, 50 and 100 Find 10 or 100 more or less than a given number	Count backwards through zero to include negative numbers Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Count forwards or backwards in steps of powers of 10 for any given number up to 1000 000	Use negative numbers in context, and calculate intervals across zero

<p><i>Repetition of 'How many?' Every time something is counted.</i></p> <p>Show 'finger numbers' up to 5.</p> <p><i>Group time- show me on your fingers how many in today?</i></p> <p><i>Number hunt, show the number found.</i></p>							
Comparing numbers							
<p>Compare quantities using language: 'more than', 'fewer than'.</p> <p><i>Discussion about changes to the number of items in a song</i></p>	<p>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.</p> <p><i>Look at two numbers or quantities of objects and recognise which is more, which is less or if they are the same</i></p>	<p>Use the language of: equal to, more than, less than (fewer), most, least</p>	<p>Compare and order numbers from 0 up to 100; use and = signs</p>	<p>Compare and order numbers up to 1000</p>	<p>Order and compare numbers beyond 1000</p> <p>Compare numbers with the same number of decimal places up to two decimal places</p>	<p>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</p>	<p>Read, write, order and compare numbers up to 10 000000 and determine the value of each digit</p>
Identifying, representing & estimating numbers							
<p>Fast recognition of up to 3 objects, without having to count them individually ('subitising').</p> <p><i>Numicon.</i></p> <p><i>Number hunts</i></p> <p><i>Teacher focus activities- how many?</i></p>	<p>Subitise (recognise quantities without counting) up to 5.</p> <p><i>Instantly recognise quantities of objects for numbers up to 5.</i></p>	<p>Identify and represent numbers using objects and pictorial representations including the number line</p>	<p>Identify, represent and estimate numbers using different representations, including the number line</p>	<p>Identify, represent and estimate numbers using different representations</p>	<p>Identify, represent and estimate numbers using different representations</p>		
Reading & Writing numbers (including Roman Numerals)							
<p>Link numerals and amounts: for example, showing the right number of objects to</p>		<p>Read and write numbers from 1 to 20 in numerals and words.</p>	<p>Read and write numbers to at least 100 in numerals and in words</p>	<p>Read and write numbers up to 1000 in numerals and in words</p>	<p>Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include</p>	<p>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</p>	<p>Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit</p>

<p>match the numeral, up to 5.</p> <p><i>Daily flash card of number for quick recall.</i></p> <p><i>Focus teach activities matching the number given to numeral.</i></p> <p>Experiment with their own symbols and marks as well as numerals.</p> <p><i>Number hunts</i> <i>Recording problems</i> <i>Recording scores in a game</i></p>				<p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p>	<p>the concept of zero and place value.</p>	<p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p>	
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Understanding Place Value

	<p>Have a deep understanding of number to 10, including the composition of each number.</p> <p><i>Recall the composition of numbers 1-10 in different ways.</i></p>		<p>Recognise the place value of each digit in a two-digit number (tens, ones)</p>	<p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p>	<p>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p>Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths</p>	<p>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</p>	<p>Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit</p> <p>Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places</p>
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Rounding

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						number and to one decimal place	
Problem Solving							
<p>Solve real world mathematical problems with numbers up to 5.</p> <p><i>Putting snack items on the tables. Teacher asking questions- e.g. have we got enough pencils, chairs?</i></p>			Use place value and number facts to solve problems	Solve number problems and practical problems involving these ideas	Solve number and practical problems that involve all of the above and with increasingly large positive numbers	Solve number problems and practical problems that involve all of the above	Solve number and practical problems that involve all of the above