

Whole-School Maths Progression: Place Value

Number and Place Value	EYFS	Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i> <i>Teacher Assessment Framework</i>		Statutory Curriculum Guidance <i>Non-Statutory Curriculum Guidance</i>			
<u>Counting</u>	Three and Four-Year-Olds Reception Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Recite numbers past 5.</p> <p>Say one number for each item in order: 1,2,3,4,5.</p> <p>Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').</p> <p>Count objects, actions and sounds.</p> <p>Count beyond ten.</p>	<p>To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>To identify one more and one less than a given number.</p> <p>To count in multiples of twos, fives and tens from different multiples to develop their recognition of patterns in the number system, including varied and frequent practice through</p>	<p>To count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.</p>	<p><i>To continue to count in ones, tens and hundreds, so that pupils become fluent in the order and place value of numbers to 1000.</i></p> <p><i>To count from 0 in multiples of 4, 8, 50 and 100.</i></p>	<p><i>To count in tens and hundreds, and maintain fluency in other multiples through varied and frequent practice.</i></p> <p><i>To count in multiples of 6, 7, 9, 25 and 1000.</i></p> <p><i>To count backwards through zero to include negative numbers.</i></p> <p><i>To find 1000 more or less than a given number.</i></p>	<p>To count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.</p> <p>To interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.</p>	

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	Verbally count beyond 20, recognising the pattern of the counting system.	increasingly complex questions. To recognise and create repeating patterns with objects and with shapes.					
<u>Reading and Writing Numbers</u>	<p>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</p> <p>Experiment with their own symbols and marks as well as numerals.</p> <p>Link the number symbol (numeral) with its cardinal number value.</p>	<p>To read and write numbers from 1 to 20 in numerals and words.</p> <p>To count, read and write numbers to 100 in numerals.</p>	To read and write numbers to at least 100 in numerals and in words.	To read and write numbers up to 1000 in numerals and in words.		To read and write numbers to at least 1 000 000 and determine the value of each digit.	To say, read and write, numbers up to 10 000 000 accurately and determine the value of each digit.
<u>Compare and Order Numbers</u>	<p>Compare quantities using language: 'more than', 'fewer than'.</p> <p>Begin to describe a sequence of events, real or</p>		To compare and order numbers from 0 up to 100; use <, > and = signs.	To compare and order numbers up to 1000.	To order and compare numbers beyond 1000.	To order and compare numbers to at least 1 000 000 and determine the value of each digit.	To order and compare numbers up to 10 000 000 accurately and determine the value of each digit.

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	<p>fictional, using words such as 'first', 'then...'</p> <p>Compare numbers.</p> <p>Understand the 'one more than/one less than' relationship between consecutive numbers.</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><u>Understanding Place Value</u></p>	<p>Understand the 'one more than/one less than' relationship between consecutive numbers.</p> <p>Explore the</p>		<p>To recognise the place value of each digit in a two-digit number (tens, ones) to <i>become fluent and apply their knowledge of</i></p>	<p>To recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <i>and apply partitioning</i></p>	<p>To recognise the place value of each digit in a four-digit number. <i>To begin to extend their knowledge of the number system to include</i></p>	<p><i>To extend and apply their understanding of the number system to the decimal numbers and fractions that they have met so far.</i></p>	<p>To use negative numbers in context, and calculate intervals across zero.</p>

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	<p>composition of numbers to 10.</p> <p>Have a deep understanding of numbers to 10, including the composition of each number.</p>		<p>numbers to reason with, discuss and solve problems. To begin to understand zero as a place holder.</p>	<p>related to place value using varied and increasingly complex problems, building on work in year 2 (for example, $146 = 100 + 40$ and 6, $146 = 130 + 16$).</p>	<p>the decimal numbers and fractions that they have met so far.</p>		
<u>Rounding</u>					<p>To round any number to the nearest 10, 100 or 1000.</p> <p>To connect estimation and rounding numbers to the use of measuring instruments.</p>	<p>To round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.</p>	<p>To round any whole number to a required degree of accuracy.</p>
<u>Roman Numerals</u>					<p>To read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</p>	<p>To read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p>	

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<u>Problem Solving</u>	Solve real world mathematical problems with	<i>To practise ordinal numbers and solve</i>	To use place value and number facts to solve <i>related</i>	To solve number problems and practical problems	To solve number and practical problems that	To solve number problems and practical problems	To solve number and practical problems that
	<p>numbers up to 5.</p> <p>Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'</p>	<i>simple concrete problems.</i>	problems to <i>develop fluency.</i>	involving these ideas.	involve all of the above and with increasingly large positive numbers.	that involve all of the above.	involve all of the above.
<u>New Vocabulary Introduced</u>	<p>One more One less Place Order Number Count Numbers up to twenty Number line Pictorial Answer Equals Read Write</p>	<p>Forwards Backwards Numerals Words Multiples Equal to More than Less than Fewer Most Least Identify Represent Digit Calculate Odd Even Pattern Numbers up to one hundred</p>	<p>Ones Tens Two- digit Estimate Place Value Solve Problems Greater than > Less than < Nearest ten Number facts Partition Count in steps Zero Compare Determine Value</p>	<p>Hundreds Three-digit ten more one hundred more ten less one hundred less Roman numeral Numbers up to one thousand</p>	<p>Thousands Four- digit Negative number One thousand more One thousand less Decimal Decimal place Rounding Place holder Nearest ten Nearest hundred Nearest thousand One place Whole number Integer Tenths Hundredths</p>	<p>Ten thousands Hundred thousands Millions Context Steps of powers Decimal equivalents Two decimal places Thousandths Numbers up to one million</p>	<p>Intervals across zero Three decimal places Hundredths Thousandths Ten thousandths Numbers up to ten million</p>