



Mathematics Curriculum Progression Map

Number: Number and Place Value

<u>EYFS</u>		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<u>3-4 Year olds</u>	<u>Reception</u>						
<u>Counting</u>							
Recite numbers past 5	Count objects, actions and sounds	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number			Count backwards through zero to include negative numbers	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	Use negative numbers in context, and calculate intervals across zero

Say one number for each item in order: 1, 2, 3, 4, 5	Count beyond 10 (count verbally beyond 20)	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	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	Count in multiples of 6, 7, 9, 25 and 1000	Count forwards or backwards in steps of powers of 10 for any given number up to 1000 000	
	Understand the “one more/one less than” relationship between consecutive numbers	Given a number, identify one more and one less		Find 10 or 100 more or less than a given number	Find 1000 more or less than a given number		
Comparing Numbers							
Compare quantities using language: more than, fewer than	Compare numbers (more than, less than, fewer, the same as, equal to)	Use the language of: equal to, more than, less than (fewer), most, least	Compare and order numbers from 0 up to 100; use and = signs	Compare and order numbers up to 1000	Order and compare numbers beyond 1000 <i>Compare numbers with the same number of decimal places - up to two decimal places (cross reference - Fractions: Decimals)</i>	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (<i>cross reference - Reading and Writing Numbers</i>)	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (<i>cross reference - Reading and Writing Numbers</i>)
Identifying, Representing and Estimating Numbers							
Develop fast recognition of up to 3	Subitise (show quantities of	Identify and represent numbers using	Identify, represent and estimate numbers	Identify, represent and estimate numbers	Identify, represent and estimate numbers		

items without having to count them (subitising)	familiar patterns, random arrangement, objects, fingers	objects and pictorial representations including the number line	using different representations, including the number line <i>(Use materials and a range of representations to practise counting, reading, writing and comparing numbers to at least 100)</i> <i>Children begin to recognise zero as a place holder)</i>	using different representations	using different representations		
Know that the last number reached, when counting a small set of objects, tells you how many there are in total (cardinal principle)	Link the number symbol (numeral) with its cardinal number value						
Show "finger numbers" up to 5							
Link numerals and amounts: e.g. showing the right number of objects to match the numeral; up to 5							

Reading and Writing Numbers (including Roman Numerals)							
Experiment with their own symbols and marks as well as numerals		Read and write numbers from 1 to 20 in numerals and words.	Read and write numbers to at least 100 in numerals and in words	Read and write numbers up to 1000 in numerals and in words <i>Children tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks (cross reference - Measurement: Time)</i>	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.	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (<i>cross reference - Comparing Numbers</i>) Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (<i>cross reference - Understanding Place Value</i>)
Understanding Place Value							
		<i>Children begin to recognise place value in numbers beyond 20 by reading, writing, counting and comparing</i>	Recognise the place value of each digit in a two-digit number (tens, ones)	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each	Read, write, order and compare numbers up to 10 000 000 and determine the value of each

		<i>numbers to 100 supported by objects and pictorial representations</i>		<i>Children use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems, building on work in year 2.</i>	<i>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 (cross reference- Fractions)</i>	<i>digit (cross reference - Reading and Writing Numbers) Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (cross reference- Fractions)</i>	<i>digit (cross reference - Reading and Writing Numbers) 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 (cross reference - Fractions)</i>
Rounding							
					<i>Round any number to the nearest 10, 100 or 1 000 Round decimals with one decimal place to the nearest whole number (cross reference)</i>	<i>Round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000 Round decimals with two decimal places to the nearest whole number and to one</i>	<i>Round any whole number to a required degree of accuracy Solve problems which require answers to be rounded to specified degrees of accuracy (cross</i>

					<i>Fractions: Decimals)</i>	<i>decimal place (cross reference - Fractions: Decimals)</i>	<i>reference - Fractions)</i>
Problem Solving							
Solve real world mathematical problems with numbers up to 5	Use place value and number facts to solve real word mathematical problems	<i>Children practise counting, ordering and indicate a quantity, including solving simple concrete problems, until they are fluent</i>	Use place value and number facts to solve problems	Solve number problems and practical problems involving all the above objectives	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 objectives