


COUNTING					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number <i>Count using money</i>	<i>Count in fractions such as halves and quarters</i>	<i>Count in 10ths</i>	Count backwards through zero to include negative numbers <i>count in hundredths and decimals</i>	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
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 1000000	<i>Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.</i>
Given a number, identify one more and one less	<i>10 more/less than any 2-digit numbers</i>	Find 10 or 100 more or less than a given number	Find 1000 more or less than a given number	<i>Find 10000 more or less than a given number</i>	<i>Find 1000000 more or less than a given number</i>
COMPARING NUMBERS					
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</i> <i>(copied from Fractions)</i>	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS					
Identify and represent numbers using objects and pictorial representations including the number line	Identify, represent and estimate numbers using different representations, including the number line	Identify, represent and estimate numbers using different representations	Identify, represent and estimate numbers using different representations		

READING AND WRITING NUMBERS (including Roman Numerals)					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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	Read and write numbers up to 10, 000 in numerals and in words	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Comparing Numbers)	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Understanding Place Value)
		<i>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</i> (copied from Measurement)		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.	
UNDERSTANDING PLACE VALUE					
Recognise the place value of each digit in a two-digit number (tens, ones) up to 20	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 digit	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
			<i>Find the effect of dividing and multiplying a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths</i> (copied from Fractions)		

ROUNDING					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Round any number to the nearest 10, 100 or 1 000	Round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000	Round any whole number to a required degree of accuracy
			<i>Round decimals with one decimal place to the nearest whole number</i> <i>(copied from Fractions)</i>	<i>Round decimals with two decimal places to the nearest whole number and to one decimal place</i> <i>(copied from Fractions)</i>	<i>Solve problems which require answers to be rounded to specified degrees of accuracy</i> <i>(copied from Fractions)</i>
PROBLEM SOLVING					
Use place value and number facts to solve problems	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

### Year 1 Number and Place Value

Read and write numbers from 1 to 20 in numerals and words.	Given a number, identify one more and one less	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
<p>Recognise numbers in sequential order. (1-20 in digits and words)</p> <p>Recognise numbers out of sequence. (1-20 in digits and words)</p> <p>Write a given number when asked. (1-20 in digits)</p> <p>Write a given number after counting objects. (1-20 in digits).</p> <p>Know ordinal numbers Teen and ty numbers</p>	<p>Order sequential numbers then order random numbers</p> <p>Add 1 more to a group of objects and relate to counting on a 100 square or number line</p> <p>Take away 1 from a small group of objects and relate to counting on a 100 square or number line</p> <p>Identify number word after or number word before. 10 more/less</p>	<p>Rote counting forwards and backwards starting from different points</p> <p>Rote counting within decades and across decades</p>	<p>Count out the right amount of objects in response to written or spoken number</p> <p>Count a given group of objects using 1-1 correspondence</p> <p>Say which group of objects is more by comparing size of groups then using number line or 100 square etc</p> <p>Explain the relative value of numbers in comparison to another.</p> <p>Place value of numbers up to 20 in terms of tens and ones and zero as a place holder.</p>	<p>Read numbers to 100 in and out of context</p> <p>Write numbers to 100 in numerals in and out of context in and out of order</p> <p>Count objects in 2s using stress then skip counting</p> <p>Rote counting in 2s relate to patterns</p> <p>Count in 5s/10s looking at patterns</p> <p>Count objects such as straw bundles in 10s</p>

### Year 2 Number and Place Value

Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward	Recognise the place value of each digit in a two-digit number(tens, ones)	Identify, represent and estimate numbers using different representations, including the number line	Compare and order numbers from 0 up to 100; use <, > and = signs	Read and write numbers to at least 100 in numerals and in words	Use place value and number facts to solve problems.
<p>Being able to count in FNWS Being able to back backwards in BNWS Count in different steps from different starting points To identify if sequence is counting forwards or backwards in regular steps Forward number counting in 10s, 2s, 5s and 3s from 0. Count from any number in 10s forwards and backwards.</p>	<p>To be able to group count accurately <i>(structured apparatus Numicon, unstructured - counters)</i> To be able to recognise the value of what each digit represents up to 100 To be able to partition 2 digit numbers up to 100 To be able to recombine 2 digit numbers up to 100 <i>make any 2</i></p>	<p>To be able to count with 1-1 correspondence. To be able to subitise regular and irregular patterns To be able to estimate a number of physical objects <i>eg. Given a jar of shells say that there are between 20 and 30.</i> To be able to estimate a number using visual cards To be able to use a number line</p>	<p>Understanding of number sequence to 100 Use comparative vocabulary when comparing 2 numbers Say whether numbers are 'close together' or 'far apart' To be able to order consecutive numbers To be able to order within a decade To be able to order over a decade To be able to</p>	<p>Being able to count in FNWS Recognition of 2 and 3 digit numbers in figures Identify 2 and 3 digit numbers in figures and words To be able to write 2 and 3 digit numbers in figures and words up to 100</p>	<p>Count and explain how many altogether.  Copy and continue a simple pattern made up of numbers or objects. Use mathematical vocabulary accurately to describe. <i>e.g. pick 3 digit cards and make all the 2-digit numbers you can and then order the numbers.</i></p>

<p>Be able to state a number 10 more/less than any given 2-digit number. To be able to count on a number line eg Counting stick. Scaled line, counting toy etc</p>	<p><i>digit numbers with structured apparatus eg cubes, Numicon, bead strings. Unstructured eg. Straws.</i></p> <p>To be able to group non manipulative (dotty pictures) objects 5 and bit partition Partition 2 digit numbers in different ways e.g. <math>23 = 10 + 13</math></p>	<p>confidently to position within a decade to recognise which 10 the number is closest to To understand the rule 5 or more rounds up, 4 or less rounds down To know FNWS and BNWS within each decade</p>	<p>order non consecutive numbers To be able to place some missing numbers on a given number line eg Counting stick. Scaled line. Understand the vocabulary of more than and less than and use the symbols. <math>&lt;</math> <math>&gt;</math></p> <p>To understand what the term odd and even means</p> <p>To recognise the pattern of odd and even</p>		
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### Year 3 Number, Place Value & Rounding

Read and write numbers up to 1000 in numerals and in words	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	Find 10 or 100 more or less than a given number	Compare and order numbers up to 1000	Identify, represent and estimate numbers using different representations	Count from 0 in multiples of 4, 8, 50 and 100;	Solve number problems and practical problems involving these ideas.
<p>Read and write numbers up to 1000 in numerals and words</p> <p>Revise '0' as a place holder in 2 and 3 digit numbers</p>	<p>Know place value of three digit numbers (hundreds, tens, ones)</p> <p>Partition two and 3 digit numbers into hundreds, tens and ones</p> <p>To be able to recognise the value of what each digit represents up to 1000</p> <p>To be able to partition 3 digit numbers up to 1000</p> <p>To be able to recombine 2 and 3 digit numbers up to 1000.</p> <p>To partition numbers in different ways e.g. <math>46 = 30 + 16</math></p> <p>Introduce place value grid for HTO</p>	<p>Find one, ten or hundred more or less from given number to up 1000</p> <p>Bridge 10 and 100</p> <p>Know place value of three digit numbers (hundreds, tens, ones)</p> <p>Count in 100s from any number</p>	<p>Compare and order numbers to 100</p> <p>Know place value of two, three and four digit numbers (hundred, tens, ones)</p> <p>Read and write numbers up to 1000</p> <p>Use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs</p>	<p>Know place value of two and three digit numbers (hundreds, tens, ones)</p> <p>Partition two and three digit numbers into hundreds, tens and ones</p> <p>Represent amounts in different ways such as pictures, tally charts, diagrams, pictograms</p>	<p>Count forwards</p> <p>Count in steps of 1, 2, 3, 4, 5 8, 50 and 100</p> <p>Link 2, 4 and 8</p> <p>Link 50 and 100</p> <p>Understand odd and even numbers</p>	<p>Use place value and number facts to solve problems</p> <p>Solve number problems up to 1000 (999)</p>

### Year 4 Number - Place Value

Count in multiples of 6, 7, 9, 25 and 1000	Find 1000 more or less than a given number	Count backwards through zero to include negative numbers	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	Order and compare numbers beyond 1000 up to 10,000
<p>Count in multiples of 1, 2, 3, 4, 5, 6, 7, 8, 9</p> <p>Relate multiple of 3 to multiple of 6, multiple of 4 to multiple of 8</p> <p>Identify patterns</p>	<p>Understand place value up to 10000</p> <p>Find 1, 10, 100 &amp; 1000 more/less up to 10,000</p>	<p>Count backwards crossing the decade</p> <p>Understand a negative number</p> <p>SCIENCE link - temperature</p> <p>Use of - in front of number to indicate negative numbers</p>	<p>Understand ThHTO</p> <p>Give value of each digit</p> <p>Partition numbers in different and more complex ways</p> <p>Use place value grid for Thousands hundreds tens and ones</p> <p>Problem solve up to and beyond 10,000</p>	<p>Compare and order numbers up to 10,000</p> <p>Understand the place value of each digit</p> <p>Read numbers beyond 1,000 in both words and figures</p>



**Year 4 Number – Place Value**


<p>Identify, represent and estimate numbers using different representations</p>	<p>Round any number to the nearest 10, 100 or 1000</p>	<p>Solve number and practical problems that involve all of the above and with increasingly large positive numbers</p>	<p>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>Represent amounts in different ways such as pictures, tally charts, diagrams, pictograms with numbers up to 10,000</p>	<p>Understand that numbers 0-4 round down and 5-9 round up</p> <p>Know that to round numbers to 100 - you look at the value of the 10's</p> <p>Know which digit to look at when rounding</p> <p>Know that to round numbers to 1,000 - you look at the value of the 100's</p> <p>Round a two digit number to the nearest 10.</p>	<p>Opportunities to solve practical problems involving number and measure</p> <p>Problems involving numbers up to and beyond 1,000 and less than 10,000</p>	<p>Understand the value of each roman numeral digit</p> <p>Find examples of Roman Numerals</p>

### Year 5 Number - Place Value

Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero	Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	Solve number problems and practical problems that involve all of the above	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.																					
<p>To understand the value of each digit in a number up to 1,000,000</p> <p>Use and understand a place value (grid/chart/line)</p> <p>Be able to read/say a number with up to 7 digits.</p> <p>Compare and order numbers with a different amount of digits.</p> <p>Arrange numbers in ascending/descending</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><i>One</i></td> <td style="width: 15%; text-align: center;"><math>10^0</math></td> <td style="width: 70%;">1. "ten to the zero"</td> </tr> <tr> <td><i>ten</i></td> <td style="text-align: center;"><math>10^1</math></td> <td>10. "ten to the one"</td> </tr> <tr> <td><i>hundred</i></td> <td style="text-align: center;"><math>10^2</math></td> <td>100. "ten to the two"</td> </tr> <tr> <td><i>thousand</i></td> <td style="text-align: center;"><math>10^3</math></td> <td>1,000. "ten to the three"</td> </tr> <tr> <td><i>ten thousand</i></td> <td style="text-align: center;"><math>10^4</math></td> <td>10,000. "ten to the four"</td> </tr> <tr> <td><i>hundred thousand</i></td> <td style="text-align: center;"><math>10^5</math></td> <td>100,000. "ten to the five"</td> </tr> <tr> <td><i>million</i></td> <td style="text-align: center;"><math>10^6</math></td> <td>1,000,000. "ten to the six"</td> </tr> </table> <p>Understand a power of 10.</p>	<i>One</i>	$10^0$	1. "ten to the zero"	<i>ten</i>	$10^1$	10. "ten to the one"	<i>hundred</i>	$10^2$	100. "ten to the two"	<i>thousand</i>	$10^3$	1,000. "ten to the three"	<i>ten thousand</i>	$10^4$	10,000. "ten to the four"	<i>hundred thousand</i>	$10^5$	100,000. "ten to the five"	<i>million</i>	$10^6$	1,000,000. "ten to the six"	<p>To know that numbers extend beyond 0.</p> <p>To know the value of negative numbers - e.g. more/less greater/smaller</p> <p>Extend number sequences beyond 0. E.g. -2,-4, -6,</p> <p>Apply ideas to temperature/ money including Debt.</p>	<p>To understand the value of each digit.</p> <p>Understand the rule of rounding.</p> <p>To know which digit/s to look at when rounding to the nearest 10,100,1000, 10 000, 100 000.</p>	<p>Numbers up to 1,000,000</p> <p>Use fractions, decimals, money, time etc</p>	<p>Recap on Roman Numerals up to 100 (C)</p> <p>Learn the symbols for numerals that represent numbers to 1000.</p> <p>Interpret numbers written in numerals.</p> <p>Write the numeral for a</p>
<i>One</i>	$10^0$	1. "ten to the zero"																								
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<i>million</i>	$10^6$	1,000,000. "ten to the six"																								

<p>order according to the digit value.</p> <p>Place significant numbers on a number line. Place other numbers correctly in relation to these.</p> <p>Be able to suggest a number larger/smaller (close/far) than a number with up to 7 digits.</p>					<p>number up to 4 digits.</p> <p>Match numbers with numerical digits to Roman Numerals.</p>
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**Year 6 Number – Place Value**

Use negative numbers in context, and calculate intervals across zero	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit	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	Round any whole number to a required degree of accuracy	Solve number and practical problems that involve all of the above
<p>To know that numbers extend beyond 0.</p> <p>To know the value of negative numbers - e.g. more/less greater/smaller</p> <p>Extend number sequences beyond 0. E.g. -2,-4, -6,</p> <p>Apply ideas to temperature/ money? Debt.</p> <p>Use appropriate strategies to find differences that bridge zero.</p>	<p>To understand the value of each digit in a number up to 10,000,000</p> <p>Use and understand a place value (grid/chart/line)</p> <p>Be able to read/say a number with up to 8 digits.</p> <p>Compare and order numbers with a different amount of digits.</p> <p>Arrange numbers in ascending/descending order according to the digit value.</p> <p>Place significant numbers on a number line. Place other numbers correctly in relation to these.</p> <p>Be able to suggest a number larger/ smaller (close/far) than a number with up to 8 digits.</p>	<p>To know place value and what each digit represents up to thousandths.</p> <p>Understand the value of each of the places, HTO. 1/10,1/100,1/1000</p> <p>To know that the decimal point does not move.</p> <p>To understand that when a number is x 10, the digits physically move  X10 = 1 place left  X100 = 2 places left  X1000 = 3 places left.</p> <p>÷10 = 1 place right  ÷100 = 2 places right  ÷1000 = 3 places right.</p> <p>Apply knowledge of place value to multiplication e.g.  <math>2 \times 4 = 8</math>  <math>20 \times 4 = 80</math>  <math>200 \times 4 = 800</math></p>	<p>To understand the value of each digit.</p> <p>Understand the rule of rounding.</p> <p>To know which digit/s to look at when rounding to the nearest 10, 100, 1000, 10 000, 100 000, 1000000.</p>	<p>See previous and apply in problems.</p> 

$$2000 \times 4 = 8000$$

Apply knowledge of place value to division e.g.

$$8 \div 4 = 2$$

$$8 \div 40 = 0.2$$

$$8 \div 400 = 0.02$$

$$8 \div 4000 = 0.002$$