

# COUNTING

Foundation Stage 1	Foundation Stage 2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		1NPV-1 Count within 100, forwards and backwards, starting with any number.		3NPV-1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.	4NPV-1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.	5NPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.	6NPV-1 Know the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000).
<p>Uses some number names Recites numbers to 10 in order.</p> <p>Knows that numbers identify how many objects are in a set</p> <p>Realise that not only objects, but anything can be counting, including steps, claps or jumps</p> <p>Recognise numerals 1 to 5</p>	<p>Count reliably from 1 to 20 Place numbers to 20 in order</p> <p>Say 1 more or 1 less than a given number</p> <p>Verbally count beyond 20.</p> <p>Count larger sets that cannot be seen.</p> <p>Order numbers to 8.</p>	<p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</p> <p>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</p> <p>Given a number, identify one more and one less</p>	<p>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward</p> <p>Connect the order of multiples of 10 to the order of numbers within 10</p>	<p>Count from 0 in multiples of 4, 8, 50 and 100;</p> <p>Find 10 or 100 more or less than a given number</p>	<p>Count backwards through zero to include negative numbers</p> <p>Count in multiples of 6, 7, 9, 25 and 1000</p> <p>Find 1000 more or less than a given number</p>	<p>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</p>	<p>Use negative numbers in context, and calculate intervals across zero</p>

and some numbers of personal significance							
Count up to 4 objects, saying correct number names							
Separate a group of 3 or 4 objects in different ways, beginning to recognise that the total is still							
COMPARING NUMBERS							
Compare 2 groups of objects, saying when they have the same number	Use language of 'more' and 'fewer' to compare two sets of objects  Compare sets by matching-make unequal sets equal.  Compare linked to ordinality.	Use the language of: equal to, more than, less than (fewer), most, least  Compare sets of objects by matching.  Compare number tracks and number lines.	Compare and order numbers from within 10 using inequality and equals symbols in expressions and equations.  To progress to comparing numbers within 20.	Compare and order numbers up to 1000	Order and compare numbers beyond 1000  Compare numbers with the same number of decimal places up to two decimal places ( <b>Fractions</b> )	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit ( <b>Reading and Writing Numbers</b> )
IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS							
Beginning to represent numbers using fingers	Show an interest in representing numbers	Identify and represent numbers using objects and	Identify, represent and estimate numbers using	Identify, represent and estimate numbers using	Identify, represent and estimate numbers using		

Show an interest in representing numbers	<p>Subitise within 3- through to 6</p> <p>Subitise objects and sound</p> <p>Identify 'the fiveness' of 5</p> <p>Identify numbers as one more than the next number.</p> <p>Identify that some numbers can be made with two equal parts- doubling.</p> <p>Identify odd and even numbers.</p> <p>Composition of '5 and a bit' moving through to 10.</p> <p>Match numerals to quantities of amounts within 10.</p>	<p>pictorial representations including the number line.</p> <p>Composition of numbers up to 10 as 'five and bit'.</p> <p>Composition of numbers up to 10 (Number bonds)</p> <p>Identify odd and even numbers linked to 1s and 2s.</p> <p>Identify numbers up to 20 on a number line.</p> <p>Explore how numbers can be partitioned into parts (part, whole)</p> <p>Composition of numbers beyond 10 (11-19) as 10 and a bit.</p>	<p>different representations, including the number line</p> <p>Composition of numbers from 5-9 as 'five and a bit'</p> <p>Compose numbers with two parts, including when two parts are even (doubles)</p> <p>To identify the different ways that 10 can be composed.</p> <p>To compose numbers 11-19 and identify as '10 and bit'</p>	different representations.	different representations		
READING AND WRITING NUMBERS (INCLUDING ROMAN 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 1 000 in numerals and in words	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed	Read, write, order and compare numbers to at least 1 000 000 and determine	Read, write, order and compare numbers up to 10 000 000 and determine the

		<p>Read, write and interpret expressions and equations with the + and = symbols to represent combining two sets (the aggregation structure of addition)</p> <p>Read, write and interpret expressions and equations with the - and = symbols to represent the partitioning of a 'whole' (the partitioning structure of subtraction)</p>			to include the concept of zero and place value.	<p>the value of each digit</p> <p>Read Roman numerals to 1 000 (M) and recognise years written in Roman numerals.</p>	value of each digit
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#### UNDERSTANDING PLACE VALUE

			<p><b>2NPV-1</b></p> <p>Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning</p>	<p><b>3NPV-2</b></p> <p>Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning</p>	<p><b>4NPV-2</b></p> <p>Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning.</p>	<p><b>5NPV-2</b></p> <p>Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning.</p>	<p><b>6NPV-2</b></p> <p>Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard</p>
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							partitioning
<p>Marks on paper, or pictures</p> <p>Sometimes matches numeral and quantity correctly</p> <p>Show interest in numerals in the environment</p>	<p>Record using marks they can interpret and explain</p> <p>Explore the concept of part whole-composing 3,4 and 5.</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 (Fractions)</p>	<p>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (Reading and writing numbers)</p> <p>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (Fractions)</p>	<p>Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (Reading and writing numbers)</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 (Fractions)</p>	
ROUNDING							
	<p>Estimate how many objects they can see and</p> <p>And check by counting them</p>				<p>Round any number to the nearest 10, 100 or 1 000</p> <p>Round decimals with one decimal place to the nearest whole number (Fractions)</p>	<p>Round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place (Fractions)</p>	<p>Round any whole number to a required degree of accuracy</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy (Fractions)</p>

PROBLEM SOLVING							
		1NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$	2NPV–2 Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10.	3NPV–3 Reason about the location of any threedigit number in the linear number system, including identifying the previous and next multiple of 100 and 10.	4NPV–3 Reason about the location of any fourdigit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.	5NPV–3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.	6NPV-3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.
Show curiosity about numbers by offering comments or asking questions	Solve problems including doubling, halving and sharing	Use place value and number facts to solve problems	<p>Solve number problems and practical problems involving these ideas.</p> <p>Use knowledge of composition to reason about expressions and equations and use the equals and inequality symbols in expressions and equations</p>	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	Use place value and number facts to solve problems

