

Number and Place Value

Counting							
Pre-School	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Recite numbers past 5	Count objects, actions & sounds. Develop 1:1 correspondence	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 & backwards with +tive & -tive whole numbers, including through 0	use negative numbers in context, and calculate intervals across zero
Say one number name for each item in order: 1, 2, 3, 4, 5	Verbally count beyond 20, recognising the pattern of the counting system	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	
Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').	Relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set	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 quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity	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 & compare numbers beyond 1000 <i>compare numbers with the same number of decimal places up to two decimal places (from Fractions)</i>	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 (appears also in Reading and Writing Numbers)
	understand that sets can be compared according to a range of attributes, including by their numerosity			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.	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	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	Understand 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

					four-digit multiples of 100.	hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.	size (multiply and divide by 10, 100 and 1,000).
	explore ways of making unequal sets equal.						

Identifying, Representing And Estimating Numbers

Develop fast recognition of up to 3 objects, without having to count them individually ('subitising') Show 'finger numbers' up to 5	Subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 Link the number symbol (numeral) with its cardinal number value	identify & represent numbers using objects & pictorial representations including the number line	identify, represent & estimate numbers using different representations, including the number line	identify, represent & estimate numbers using different representations	identify, represent & estimate numbers using different representations		
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Reading & Writing Numbers (Including Roman Numerals)

Link numerals & amounts: e.g. showing the right number of objects to match the numeral, up to 5 Experiment with their own symbols and marks as well as numerals	Link the number symbol (numeral) with its cardinal number value Begin to recognise numerals, relating these to quantities they can subitise and count	read & write numbers from 1 to 20 in numerals & words.	read & write numbers to at least 100 in numerals & in words	read & write numbers up to 1 000 in numerals & in words <i>tell & write the time from an analogue clock, including using Roman numerals from I to XII, & 12-hour & 24-hour clocks (from Measurement)</i>	read Roman numerals to 100 (I to C) & know that over time, the numeral system changed to include the concept of zero & place value.	read, write, order & compare numbers to at least 1 000 000 & determine the value of each digit (also in Comparing Numbers) read Roman numerals to M & recognise years in Roman numerals	read, write, order & compare numbers up to 10 000 000 & determine the value of each digit (appears also in Understanding Place Value)
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Understanding Place Value

	Understand the 'one more than/one less than' relationship between consecutive numbers Explore the composition of numbers to 10		Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and	Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-	Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard	read, write, order & compare numbers to at least 1 000 000 & determine the value of each digit (also in Reading & Writing Numbers)	read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)
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	explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot		nonstandard partitioning.	standard partitioning.	partitioning find the effect of dividing a one- or two-digit number by 10 & 100, identifying the value of the digits in the answer as units, tenths & hundredths (from Fractions)	recognise & use thousandths & relate them to tenths, hundredths & decimal equivalents (from Fractions)	identify the value of each digit to three decimal places & multiply & divide numbers by 10, 100 & 1000 where the answers are up to three decimal places (from Fractions)
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Rounding

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Problem Solving

Solve real world mathematical problems with numbers up to 5	use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number	use place value and number facts to solve problems Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =	solve number problems and practical problems involving these ideas. Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10.	solve number & practical problems that involve all of the above & with increasingly large positive numbers Reason about the location of any three digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.	solve number problems and practical problems that involve all of the above Reason about the location of any four digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100	solve number and practical problems that involve all of the above 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	use place value and number facts to solve problems Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system
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