# National Centre for Excellence in the Teaching of Mathematics

### Number: Number and Place Value

	COUNTING					
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
count to 20 and beyond, forwards and backwards, beginning with 0 or 1, or from any given number	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
explore double facts and how quantities can be distributed equally given a number,	count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens given a number,	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; find 10 or 100 more or	count in multiples of 6, 7, 9, 25 and 1000 find 1000 more or less	count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	
use objects to identify one more and one less	identify one more and one less		less than a given number	than a given number		
			COMPARING			
use the language of: greater than, less than, the same	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  compare numbers with the same number of decimal places up to two decimal places (copied from Fractions)	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)





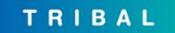




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	IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS							
identify and represent numbers using objects and pictorial representations	identify and represent numbers using objects and pictorial representations including the number line	identify, represent 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	oman Numerals)			
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
read numbers from 1 to 20 in 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  tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks (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.	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 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 (appears also in Understanding Place Value)		
	UNDERSTANDING PLACE VALUE							
		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 1000000 and determine the value of each digit (appears also in Reading	read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears		











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			and Writing Numbers)	also in Reading and Writing Numbers)
		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 (copied from Fractions)	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (copied from Fractions)	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 (copied from Fractions)

	ROUNDING							
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
				round any number to	round any number up	round any whole		
				the nearest 10, 100 or	to 1000000 to the	number to a required		
				1000	nearest 10, 100, 1000,	degree of accuracy		
					10 000 and 100 000			
				round decimals with one	round decimals with two	solve problems which		
				decimal place to the	decimal places to the	require answers to be		
				nearest whole number	nearest whole number	rounded to specified		
				(copied from Fractions)	and to one decimal place	degrees of accuracy		
					(copied from Fractions)	(copied from Fractions)		
	PROBLEM SOLVING							
		use place value and	solve number	solve number and	solve number	solve number and		
		number facts to solve	problems and practical	practical problems that	problems and practical	practical problems		
		problems	problems involving	involve all of the above	problems that involve	that involve all of the		
			these ideas.	and with increasingly	all of the above	above		
				large positive numbers				







