## Number: Number and Place Value

## Cardinality and Counting

Counting - Saying number words in sequence, tagging each object with one number word, knowing the last number counted gives the total so far
subitising - recognising small quantities without needing to count them all
Numeral meanings - matching a number symbol with a number of things
Conservation - knowing that the number does not change if things are rearranged

## Comparison

More than/less than
Identifying groups with the same number of things
Comparing numbers and reasoning
Knowing the 'one more than/one less than, relationship between counting numbers

| 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 <br> Autumn 1 \& 4 <br> Spring 2 <br> Summer 4 |  |  | count backwards through zero to include negative numbers <br> Autumn 1 \& 4 | interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Autumn 1 | use negative numbers in context, and calculate intervals across zero <br> Autumn 1 |
| count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens Autumn 1 \& 4 Spring 2 \& Summer 4 | count in steps of 2,3 , and 5 from 0 , and in tens from any number, forward or backward Autumn 1 | count from 0 in multiples of 4 , 8,50 and 100 ; <br> Autumn 1 \& 3 | count in multiples of 6, 7, 9, 25 and 1000 <br> Autumn 1 \& 4 | count forwards or backwards in steps of powers of 10 for any given number up to 1000 000 Autumn 1 |  |
| given a number, identify one more and one less <br> Autumn 1 \& 4 <br> Spring 2 \& Summer 4 |  | find 10 or 100 more or less than a given number Autumn 1\& 3 | find 1000 more or less than a given number Autumn 1 |  |  |


| use the language of: equal to, more than, less than (fewer), most, least <br> Autumn 1 \& 4 <br> Spring 2 <br> Summer 4 | compare and order numbers from 0 up to 100; use <, > and $=$ signs Autumn 1 | compare and order numbers up to 1000 <br> Autumn 1 | order and compare numbers beyond 1000 <br> Autumn 1 | read, write, order and compare numbers to at least 1000000 and determine the value of each digit (also in Reading \& Writing Numbers) Autumn 1 | read, write, order and compare numbers up to 10000000 and determine the value of each digit (appears also in Reading and Writing Numbers) <br> Autumn 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | compare numbers with the same number of decimal places up to two decimal places (from Fractions) |  |  |
| IDENTIIFYING, REPRESENTING AND ESTIMATING NUMBERS |  |  |  |  |  |
| identify and represent numbers using objects and pictorial representations including the number line Autumn 1 \& 4 Spring 2 \& Summer 4 | identify, represent and estimate numbers using different representations, including the number line Autumn 1 | identify, represent and estimate numbers using different representations Autumn 1 | identify, represent and estimate numbers using different representations Autumn 1 |  |  |


| READING AND WRIIING 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. Autumn 1 \& 4 Spring 2 <br> Summer 4 | read and write numbers to at least 100 in numerals and in words <br> Autumn 1 | read and write numbers up to 1000 in numerals and in words Autumn 1 | 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. <br> Autumn 1 | read, write, order and compare numbers to at least 1000000 and determine the value of each digit (appears also in Comparing Numbers) <br> Autumn 1 | read, write, order and compare numbers up to 10000000 and determine the value of each digit (appears also in Understanding Place Value) <br> Autumn 1 |
|  |  | tell and write the time from an analogue clock, including using Roman numerals from 1 to XII, and 12-hour and 24hour clocks (copied from Measurement) |  | read Roman numerals to 1 000 (M) and recognise years written in Roman numerals. Autumn 1 |  |
| UNDERSTANDING PLACE VALUE |  |  |  |  |  |
|  | recognise the place value of each digit in a two-digit number (tens, ones) Autumn 1 | recognise the place value of each digit in a three-digit number (hundreds, tens, ones) Autumn 1 | recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) Autumn 1 | read, write, order and compare numbers to at least 1000000 and determine the value of each digit Autumn 1 (appears also in Reading and Writing Numbers) <br> recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (copied from Fractions) | read, write, order and compare numbers up to 10000000 and determine the value of each digit (appears also in Reading and Writing Numbers) <br> Autumn 1 |
|  |  |  | 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) |  | 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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  | round any number to the nearest 10,100 or 1000 Autumn 1 | round any number up to 1 000000 to the nearest 10,100 , 1000,10000 and 100000 Autumn 1 | round any whole number to a required degree of accuracy Autumn 1 |
|  |  |  | round decimals with one decimal place to the nearest whole number (copied from Fractions) | round decimals with two decimal places to the nearest whole number and to one decimal place (copied from Fractions) | solve problems which require answers to be rounded to specified degrees of accuracy (copied from Fractions) |
| PROBLEM SOLVING |  |  |  |  |  |
|  | use place value and number facts to solve problems Autumn 1 | solve number problems and practical problems involving these ideas. Autumn 1 | solve number and practical problems that involve all of the above and with increasingly large positive numbers Autumn 1 | solve number problems and practical problems that involve all of the above Autumn 1 \& 2 | solve number and practical problems that involve all of the above Autumn 1 |

