

#### <u>Maths Progression</u> Place Value

## Year 3

- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- identify, represent and estimate numbers using different representations
- 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)
- compare and order numbers up to 1000
- solve number problems and practical problems involving these ideas

### Year 4

- count in multiples of 6, 7, 9, 25 and 1000
- count backwards through zero to include negative numbers
- identify, represent and estimate numbers using different representations
- 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
- find 1000 more or less than a given number
- recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- order and compare numbers beyond 1000
- round any number to the nearest 10, 100 or 1000 solve number and practical problems that involve all of the
- above and with increasingly large positive numbers

Year 6

- accuracy
- intervals across zero
- of the above

#### **EYFS**

- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 Experiment with their own symbols and marks as well as numerals.
- Count objects, actions and sounds
- Compare numbers.
- Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same Uses number names and symbols when comparing numbers, showing interest in large numbers Estimates of numbers of things, showing understanding of relative size
- Recite numbers past 5.
- Say one number for each item in order: 1, 2, 3, 4, 5.
- Count beyond ten.
- May enjoy counting verbally as far as they can go Points or touches (tags) each item, saying one number for each item, using the stable order of 12,3,4,5. Uses some number names and number language within play, and may show fascination with large number names and number language within play.
- Begin to recognise numerals 0 to 10
- Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0 Increasingly confident at putting numerals in order 0 to 10 (ordinality)
- Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Show 'finger numbers' up to 5. Subitise

- Link the number symbol (numeral) with its cardinal number value. Subitises one, two and three objects (without counting) Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) Links numerals with amounts up to 5 and maybe beyond Explores using a range of their own marks and signs to which they ascribe mathematical meanings Engages in subitising numbers to four and maybe five

- Counts out up to 10 objects from a larger group Matches the numeral with a group of items to show how many there are (up to 10)
- Solve real world mathematical problems with numbers up to 5. Understand the 'one more than/one less than' relationship between consecutive numbers.
- Explore the composition of numbers to 10. Automatically recall number bonds for numbers 0-5 and some to 10.
- Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers Beginning to use understanding of number to solve practical problems in play and meaningful activities

- Beginning to recognise that each counting number is one more than the one before Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three

- In practical activities, adds one and subtracts one with numbers to 10 Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-"

# Year 5

5

- 10 000 and 100 000
- of the above

### Year 1

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- Count numbers to 100 in numerals; count in multiples of twos, fives and tens
- identify and represent numbers using objects and pictorial representations
- read and write numbers to 100 in numerals
- read and write numbers from 1 to 20 in numerals and words
- given a number, identify one more and one less



- and backward
- including the number line

read, write, (order and compare) numbers up to 10 000 000 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 round any whole number to a required degree of

use negative numbers in context, and calculate

solve number and practical problems that involve all





• count forwards or backwards in steps of powers of 10 for any given number up to 1000 000

count forwards and backwards with positive and negative whole numbers, including through zero

read, write, (order and compare) numbers to at least 1000 000 and determine the value of each digit

read Roman numerals to 1000 (M) and recognise years written in Roman numerals

(read, write) order and compare numbers to at least 1000 000 and determine the value of each digit interpret negative numbers in context

round any number up to 1 000 000 to the nearest 10, 100, 1000,

solve number problems and practical problems that involve all.

• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward.

read and write numbers to at least 100 in numerals and in words identify, represent and estimate numbers using different representations,

recognise the place value of each digit in a two-digit number (tens, ones) compare and order numbers from 0 up to 100; use <, > and = signs use place value and number facts to solve problems