Ladygrove Primary School

Progression in Number and Place Value

The following document outlines what children should be able to do by the end of each school year for number and place value. For each year group, children should be solving problems based on these number and place value skills.

Nursery Programme of Study

Birth to Three

Pupils should be taught to:

- Combine objects like stacking blocks and cups. Put objects inside others and take them out again.
- Take part in finger rhymes with numbers.
- Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.
- Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.'

Three and Four-Year Olds

Pupils should be taught to:

- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- 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.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Compare quantities using language: 'more than', 'fewer than'.

Reception Programme of Study

Pupils should be taught to:

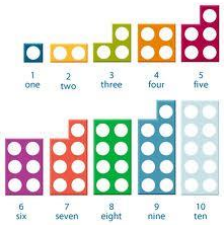
- Recite numbers past 5.
- Count objects, actions and sounds.
- Subitise.
- Link the number symbol (numeral) with its cardinal number value.
- Count beyond ten.
- Compare numbers.
- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Explore the composition of numbers to 10.
- Automatically recall number bonds for numbers 0–10.

Year 1 Programme of Study

Pupils should be taught to:

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.

Early counting to be supported through the use of Numicon as it is within EYFS.



Children to use physical apparatus to build numbers. Showing clear groups of 10 and ones/units.

- count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s.
- given a number, identify 1 more and 1 less.



Children to physically build calculations using a range of apparatus.

- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.
- read and write numbers from 1 to 20 in numerals and words.

Year 2 Programme of Study

Pupils should be taught to:

- count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward

When working on x2 ensure children are understanding that this relates to doubling as well as halving.

- recognise the place value of each digit in a two-digit number (10s, 1s)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use <, > and = signs
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems

Year 3 Programme of Study

Pupils should be taught to:

- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)
- compare and order numbers up to 1,000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1,000 in numerals and in words
- solve number problems and practical problems involving these ideas

Year 4 Programme of Study

Pupils should be taught to:

- count in multiples of 6, 7, 9, 25 and 1,000
- find 1,000 more or less than a given number
- count backwards through 0 to include negative numbers
- recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)
- order and compare numbers beyond 1,000
- identify, represent and estimate numbers using different representations
- round any number to the nearest 10, 100 or 1,000
- solve number and practical problems that involve all of the above and with increasingly large positive numbers
- read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value

Year 5 Programme of Study

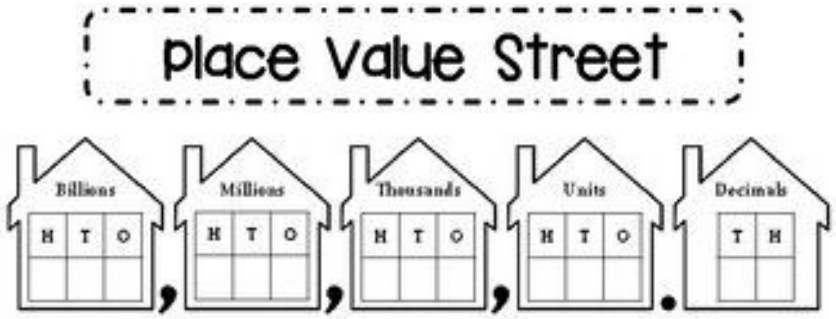
Pupils should be taught to:

- read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit
- count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000
- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0
- round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000
- solve number problems and practical problems that involve all of the above
- read Roman numerals to 1,000 (M) and recognise years written in Roman numerals

Year 6 Programme of Study

Pupils should be taught to:

- read, write, order and compare numbers up to 10,000,000 and determine the value of each digit



Clear use of the houses model to support the development of writing numbers correctly as well as being to order them.

- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across 0
- solve number and practical problems that involve all of the above