MATHS PROGRESSIONS

Place Value

Key:

Counting

Reading & Writing Numbers

Identifying, Representing & Estimating Numbers

Understanding Place Value

Comparing Numbers

Rounding

Problem solving & Reasoning

RECEPTION

- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward
- Compare numbers to 100 using the signs < > =
- Estimate and order numbers on a number-line

YEAR 1

- Recognise the place value of each digit in a two-digit number
- Use place value knowledge to solve routine and non-routine problems

YEAR 2

- Compare and prove using objects to show the understanding of value and the links between numerals and actual quantities

YEAR 3

- Count reliably with numbers from 1 to 20, forward and back
- Given a number explain/show what makes it that number (use a variety of objects)
- Subitise with number; recognise patterns and make connections (numbers to 20)
- Recall and memorise number bonds to 20

YEAR 4

- Understand what is meant by one more and one less
- Compare and order numbers to 100
- Count forward to 100 reliably from varying starting points (count back)
- Count in varying intervals of 2,5 and 10s
- Count from 0 in multiples of 4, 8, 50 and 100
- Find 10 more and 10 less than a given value
- Count from different starting values in intervals of 2,5 and 10 (count back)
- Apply knowledge to different contexts; quantities, amounts and measure

YEAR 5

- Count backwards through 0 to include negative numbers
- Count in multiple of 6, 7, 8, 9 , 25 and 1000
- Round numbers to nearest 10, 100,1000
- Round numbers to nearest whole number and tenth (explore with numbers up to 2.d.p)
- Find 1000 more and less than a given number
- Compare and order decimal numbers up to 2.d.p—link to fractions
- Problem solve using positive, negative and decimal numbers (up to 2.d.p)
- Read and write Roman numerals up to 100
- Recognise the PV of numbers up to 4-digits and the effect of dividing and multiplying values by powers of 10
- Compare and order numbers to 1000
- Read, identify and write numbers in words to 1000
- Recognise the PV in any 3-digit number
- Solve routine and non-routine problems involving PV

YEAR 6

- Read, write and understand the value of decimal numbers to 3.d.p
- Round any whole or decimal number to any required degree of accuracy
- Solve routine and non-routine problems involving number
- Count in a variety of different intervals up 10,000,000 including in intervals of tenths, hundredths and thousandths
- Read and interpret Roman Numerals with increasing difficulty
- Use negative numbers in context
- Read, write and order numbers to 10,000,000 and understand the value of each digit
- Compare numbers up to 10,000,000
- Divide and multiply using powers of 10 and understand what effect this has on the value of the number
- Count in varying intervals forward and backward from positive and negative numbers
- Count in power of 10 intervals up to 1,000,000
- Read, write and order numbers up to 1,000,000 , identify where there is 0 value in any place holder
- Compare numbers to 1,000,000 with increasing sophistication and difficulty
- Round numbers to nearest 0.1, 1, 10, 100, 1000, 10,0000, 100,000 and 1,000,000
- Read, write and apply understanding of Roman Numerals up to 1000
- Count, order and compare decimal numbers up to 3.d.p.
- Solve routine and non-routine problems involving numbers up to 1,000,000, decimal numbers up to 3.d.p and negative numbers.