WHOLE SCHOOL MATHS PROGRESION

## Fluency

To become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

## Reason Mathematically

To reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

Solve Problems

To solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

NUMBER \& PLACE VALUE

| COUNTING |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
| Verbally count beyond 20, recognising the pattern of the counting system | 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 |
| Subitise (recognise quantities without counting) up to 5 | Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens | 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 | Count in multiples of 6, 7, 9 , 25 and 1,000 | Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 |  |
| Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity | Given a number, identify one more and one less |  | Find 10 or 100 more or less than a given number | Find 1,000 more or less than a given number |  |  |
| COMPARING NUMBERS |  |  |  |  |  |  |
| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
| Uses the language more or fewer to compare two sets of objects | 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 1,000 | Order and compare numbers beyond 1,000 <br> Below taken from fractions: Compare numbers with the same number of decimal places up to two decimal places | Read, write, order and compare numbers to at least $1,000,000$ and determine the value of each digit <br> The above also appears in Reading and Writing Numbers | Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit <br> The above also appears in Reading and Writing Numbers |
| IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS |  |  |  |  |  |  |
| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
| Explore and represent patterns within numbers up to 10 , including evens and odds, double facts and how quantities can be distributed equally | 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 |  |  |
| READING AND WRITING NUMBERS (INCLUDING ROMAN NUMERALS) |  |  |  |  |  |  |
| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
|  | Read and write numbers from 1 to 20 in numerals and words | Read and write numbers to at least 100 in numerals and words | Read and write numbers up to 1,000 in numerals and words |  | Read, write, order and compare numbers to at least 1,000,000 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 |

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| The above also appears in <br> Comparing Numbers | The above also appears in <br> Understanding Place Value |
| :---: | :---: |
| Read Roman Numerals to <br> 1,000 (M) and recognise years <br> written in Roman Numerals |  |

understanding place value

| EYFS | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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, ones) | Read, write order and compare numbers to at least $1,000,000$ and determine the value of each digit <br> The above also appears in reading and writing numbers | Read, write order and compare numbers to at least $10,000,000$ and determine the value of each digit <br> The above also appears in reading and writing numbers |
|  |  |  |  | The below is taken from fractions: <br> Find the effect of dividing a oneor two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths | The below is taken from fractions: <br> Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents | The below is taken from fractions: <br> Identify the value of each digit to three decimal places and multiply and divide numbers by 10,100 and 1,000 where the answers are up to three decimal places |

