

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 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 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 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				



WHOLE SCHOOL MATHS PROGRESION

					The above also appears in Comparing Numbers	The above also appears in Understanding Place Value				
			Below is taken from Measurement: Tell and write the time from an analogue clock, including using Roman Numerals from I to XII, and 12-hour and 24-hour clocks	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	Read Roman Numerals to 1,000 (M) and recognise years 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 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 The above also appears in reading and writing numbers				
				The below is taken from fractions:	The below is taken from fractions:	The below is taken from fractions:				
				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	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	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				