**White Rose Maths – New Scheme of Learning (2022)  ** **Whole School Long Term Plan – Autumn Term**
Nursery		**Number** • Count in lots of different ways and at different opportunities (actions, jumping, clapping) • Recite numbers 1—10 • Count reliably from 1 to 5, pointing to each object as we count. • Use language of quantities such as 'more' and 'lots of'	**Shape** • Shows an interest in shape and space by playing with shapes or making arrangements with objects.
Reception	**Counting Principles** • **1 to 1 principle** (assign one number to each number being counted) • **The stable order principle** (children understand that numbers need to be said in a certain order) • **The cardinal principle** (children know the number assigned to the final object is the total number of objects in the group) • **The abstract principle** (children understand that anything can be counted including things that cannot be touched including sounds and movement) • **The order-irrelevance principle** (children understand that the order we count things in is irrelevant, there will still be the same number)	**Number and Place Value** • Counting to 5 (1, 2, 3, 4, 5) **Addition and Subtraction** • Sorting (into groups) **Number and Place Value** • Comparing quantities of identical and non-identical groups **Addition and Subtraction** • 1 more/1 less **Measurement** • Time (My day)		**Shape, Space and Measure** • Show an interest in shape and space • Use positional language • Begin to use language to describe shapes of everyday objects
Year 1	**Number: Place Value** To sort, count, represent, compare, order, read and write numbers within 10. 1 more/1 less. To recognise numbers as words. Identify numbers on a number line.	**Number: Addition and Subtraction within 10** Introduce parts and wholes (Part-Whole Model). Number bonds to 10. Fact families – addition facts. Fact families – the 8 facts. Addition problems. Subtraction – take	**Geometry: Shape** To recognise, name and sort 2D and 3D shapes. Find and make patterns with 2D and 3D shapes.

		away/how many left? Subtraction on a number line. Add or subtract 1 or 2.		
Year 2	**Number: Place Value** To count objects to 100. Read and write numbers in words and numerals. Represent numbers to 100. Compare and order objects and numbers. Count in 2s, 3s, 5s and 10s. Estimate numbers on a number line. Recognise 10s and 1s	**Number: Addition and Subtraction** To know number bonds to 20. Add and subtract 1s and 10s crossing 10. Find 10 more/10 less. Missing number problems. Number bonds to 100 (10s)		**Geometry: Properties of Shape** Recognise 2D and 3D shapes. Count sides and vertices on 2D shapes. Sort/Draw 2D shapes. Lines of symmetry. Make patterns with 2D shapes. Count faces /edges and vertices on 3D shapes. Sort/make patterns with 3D shapes
Year 3	**Number: Place Value** To represent and order numbers to 100 and 1000. To compare numbers and objects to 1000. To count in 50s. To find 1, 10, 100 more or less than a given number. Estimate numbers on a number line to 1,000.	**Number: Addition and Subtraction** To add and subtract multiples of 10 and 100. to add and subtract 3-digit and 1s, 3-digit and 10s and 3-digit and 100s with and without exchanges (crossing 10), using formal written methods (column). Add and subtract 2-digit and 3-digit numbers. Estimate answers. Inverse operations. Complements to 100.		**Number: Multiplication and Division** Multiplication – equal groups. Share and group. Use arrays. To recall and use multiplication facts for 3, 4 and 8x tables. To write and calculate multiplication and division statements using known times tables facts.
Year 4	**Number: Place Value** To know Roman Numerals to 100. To know the value of each digit in a 4-digit number. Partition numbers. Round numbers to the nearest 10, 100, 1000. Count in 1000s. Compare and order numbers to 10,000. Find 1, 10, 100, 1000 more or less than a given number. Identify and estimate numbers on a number line to 10,000	**Number: Addition and Subtraction** To add and subtract numbers with up to 4-digit with and without exchanges, including more than one exchange, using formal written methods (column). Estimate answers.	**Measure: Area** Counting squares. Making shapes. Comparing area.	**Number: Multiplication and Division** To count in multiples of 3, 6, 7, 9. Multiply and divide by 6, 7, 9, 11 and 12. Multiply by 1 and 0. Divide by 1 and itself. Multiply 3 numbers.
Year 5	**Number: Place Value** To read, recognise, compare, order and round numbers to	**Number: Addition and Subtraction**	**Number: Multiplication and Division**	**Number: Fractions A** Equivalent fractions. Improper fractions to mixed numbers.

	1,000,000. To know Roman Numerals to 1000. To count forwards and backwards in powers of 10 for numbers up to 1,000,000. 10, 100, 1,000, 10,000, 100,000 more or less.	To add and subtract whole numbers with more than 4 digits using formal written methods (column). To use rounding to check answers and determine levels of accuracy. Inverse operations. Multi-step addition and subtraction problems. Compare calculations.	To multiply and divide whole numbers by 10, 100 and 1000. To identify multiples and factors, including factor pairs and common factors of 2 numbers. To recognise and use square numbers and cube numbers including the correct notation. To establish whether a number up to 100 is a prime number and recall prime numbers up to 19.	Mixed numbers to improper fractions. Compare and order fractions less than and greater than 1. Add and subtract fractions. Add fractions within 1. Add and subtract fractions with the same denominator that are multiples of the same number.	
Year 6	**Number: Place Value** To read, write, order and compare numbers to 10,000,000 and determine the value of each digit. Round numbers to a degree of accuracy. Use negative numbers in context and calculate intervals across 0. Power of 10.	**Number: Addition and Subtraction Multiplication and Division** Multiply and divide a 4-digit by a 2-digit number using long multiplication and division with remainders. Identify common numbers, common factors and prime numbers. Use knowledge of the order of operations to solve calculations with multiple operations. Estimate and check answers within an appropriate degree of accuracy.	**Number: Fractions A** To simplify fractions. To compare and order fractions. Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply pairs of simple pairs of proper fractions, writing the answer in its simplest form. Multi-step problems.	**Number: Fractions B** Multiply and divide a fraction by an integer. Find fractions of amounts	**Measure: Converting Units** Metric measures. Convert metric measures. Calculate with metric measures. Miles and km. imperial measures.