Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Number and Place Value: - Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. - 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. - Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10,000 and 100,000 - Solve number problems and practical problems that involve all of the above. <u>Number:</u> Addition and Subtraction: - Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).	Number: Multiplication and Division: - Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. - Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. - Establish whether a number up to 100 is prime and recall prime numbers up to 19. - Solve problems involving multiplication and division including using their knowledge of factors and multiples. - Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). - Solve problems involving multiplication and division including using their knowledge of squares and cubes.	Number: Multiplication and Division: - Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two- digit numbers. - Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. - Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. - Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	Number: Decimals and Percentages: - Read and write decimal numbers as fractions [for example, 0.71 = 71/100] - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. - Read, write, order and compare numbers with up to three decimal places. - Round decimals with two decimal places to the nearest whole number and to one decimal place - Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. - Solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those	Geometry: Properties of Shape: - Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. - Draw given angles, and measure them in degrees (°). - Identify: - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and 2 1 a turn (total 180°) - other multiples of 90°. - Use the properties of rectangles to deduce related facts and find missing lengths and angles. - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. - Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.	Number: Decimals: - Solve problems involving number up to three decimal places. - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. <u>Number and Place Value:</u> - Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. <u>Measurement:</u> Converting Units: - Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; gram and kilogram; litre and millilitre). - Understand and use approximate equivalences between metric units and

Maths Long Term Plan

Year 5

- Add and subtract numbers mentally with increasingly large numbers. - Multiply and divide whole numbers by 10, 100 and 1000. Number: Fractions: fractions with a denominator of a multiple of 10 or 25. - Use rounding to check answers to calculations and - Multiply and divide numbers mentally drawing Multiply proper fractions and mixed numbers, supported fractions with a denominator of a multiple of 10 or 25.	<u>Geometry:</u> Position and Direction: - Identify, describe and represent the position of a	common imperial units such as inches, pounds and pints. - Solve problems involving
mentally with increasingly large numbers. numbers by 10, 100 and 1000. Fractions: of a multiple of 10 or 25. - Use rounding to check answers to calculations and - Multiply and divide numbers mentally drawing - Multiply and divide whole numbers, supported - Measurement: Perimeter and Area:	Position and Direction: - Identify, describe and	- Solve problems involving
- Use rounding to check answers to calculations and - Use rounding to check answers to calculations and - Multiply and divide numbers mentally drawing - Multiply proper fractions and mixed numbers by whole numbers, supported - Multiply proper fractions	Direction: - Identify, describe and	
determine, in the context of a problem, levels of accuracy.upon known facts.by materials and diagrams Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (m2) and square metres (m2) and square between the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 and 1/5] Compare and order fractions whose denominators are all multiples of the same number Complete, read and interpret information in tables, including timetables Add and subtract fractions with the same denominators and denominators that are multiples of the same- Add and subtract fractions	shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	converting between units of time. - Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. <u>Measurement:</u> Volume/ Capacity: - Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water].