

Week	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	Number - Place Value 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 interpret negative numbers in context, Count forwards and backwards with positive and negative whole numbers, including through zero Solve number and practical problems that involve all of the above read Roman numerals to 1000 (M) and recognise years written in Roman numerals.				Number - Addition and Subtraction add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) add and subtract numbers mentally with increasingly large numbers solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign		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 (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19 recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) Multiply and divide numbers mentally drawing upon know facts solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes multiply and divide whole numbers by 10, 100 and 1000				Measures – including Area Perimeter measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes	

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Spring	Number - Multiplication and Division multiply numbers up to 4 digits by a one-digit 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. Multiply and divide numbers mentally drawing upon know facts 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 multiplication and division including using their knowledge of factors and multiples, squares and cubes solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign					Number - Fractions Identify name and write equivalent fractions of a given fraction represented visually including tenths Compare and order fractions whose denominators are all multiples of the same number recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers supported by materials and diagrams						Residential

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Summer	Statistics including reading time tables solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. Interpret and present discrete data using appropriate graphical methods, including bar charts solve comparison, sum and difference problems using information presented in a line graph complete, read and interpret information in tables including timetables	Number –Decimals, fractions Read and write decimal numbers as fractions [for example, $0.71 = 71/100$] Round decimals with two decimal places to the nearest whole number and to one decimal place Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Solve problems involving number up to two decimal places		Geometry – Properties of shape distinguish between regular and irregular polygons based on reasoning about equal sides and angles. use the properties of rectangles to deduce related facts and find missing lengths and angles identify 3-D shapes, including cubes and other cuboids, from 2-D representations know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles draw given angles, and measure them in degrees ($^{\circ}$) identify angles at a point and one whole turn (360°) angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90°		Geometry – position and direction identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	Measures - Converting Units Estimate, compare and calculate different measures, including money in pounds and pence solve simple measure and money problems involving fractions and decimals to two decimal places. multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling • solve problems involving converting between units of time		Measures - Volume estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]