

Autumn 1		Autumn 2		
Number and Place Value (3 weeks)	Four operations (4 weeks)	Fractions (4 weeks)	Decimals & percentages (3 weeks)	
 read, write, order and compare numbers up to 10 000 000 and determine the value of each digit round any whole number to a required degree of accuracy use negative numbers in context, and calculate intervals across zero solve number and practical problems that involve all of the above 	 multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context perform mental calculations, including with mixed operations and large numbers identify common factors, common multiples and prime numbers use their knowledge of the order of operations to carry out calculations involving the four operations solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	 use common factors to simplify fractions use common multiples to express fractions in the same denomination compare and order fractions, including fractions > 1 add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions multiply simple pairs of proper fractions, writing the answer in its simplest form divide proper fractions by whole numbers [for example, ¹/₃ ÷ 2 = ¹/₆] associate a fraction with division and calculate decimal fraction equivalents recall and use equivalences between simple fractions, decimals and percentages, including in different contexts 	 identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places solve problems which require answers to be rounded to specified degrees of accuracy recall and use equivalences between simple fractions, decimals and percentages, including in different contexts 	



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Vocabulary: Ten million Millions Thousands Tens Ones zero Place Value Greater Than Less Than Rounded Partition	 solve problems involving addition, subtraction, multiplication and division use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. Vocabulary: Add Total Make Sum Plus Altogether Difference Subtract Less Minus Take away Column addition Column subtraction Inverse Multiplication Division 	Vocabular Numerator Der Proper frac Improper fra Mixed num Factor Highest common Lowest common Common denor	nominator tion action ber n multiple multiple	Vocabulary: Decimals Percentages Decimal Fraction Decimal Place Sharing Partitioning Tenths Hundredths Thousandth Grouping Exchanging Sharing % Per cent = out of 100 Percentage Discount
	Formal methods Divide	Common denor Common nume		Equivalent fraction
	Multiply Operations Factors Multiples			Equivalent Decimal Convert Compare Order
	Spring 1		Spring 2	
(Week 1: Consolidation of Fractions, decimals and percentages) Ratio (2 weeks)	Number - Algebra (2 weeks)	Measurement Converting units (1 week)	Measurement Perimeter Area & Volume (2 weeks)	Geometry- Properties of shape (3 weeks)
 solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts 	 use simple formulae expressed in words generate and describe linear number sequences express missing number problems algebraically 	 solve problems involving the calculation and conversion of units of measure, using decimal notation up to 	 recognise that shape with the same area can have different perimeters and vice versa 	is dimensions and angles
	• find pairs of numbers that satisfy an equation	three decimal places	• recognise when it is	



 solve problems involving the calculation of percentages [for example, of measures, such as 15% of 360] and the use of percentages for comparison solve problems involving similar shapes where the scale factor is known or can be found solve problems involving unequal sharing and grouping using knowledge of fractions and multiples 	 with two unknowns enumerate possibilities of combinations of two variables 	 where appropriate use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places convert between miles and kilometres 	 possible to use formulae for area and volume of shapes calculate the area of parallelograms and triangles calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3]. 	 compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
Vocabulary: Ratio Proportion Part Whole Scale Factor Enlargement Similar shapes Length Width	Vocabulary: Term to Term rule Variable Unknown Expression Equation Formula One step- equation 2 step equation Enumerate Substitution	Vocabulary: Mass Gram Kilogram Capacity Volume Millilitre Litre Millimetre Ounce Inch foot Gallon Mile Kilometre Stone Pint Pound	Vocabulary: Perimeter Area Volume Cubic unit Cuboid Width Length Height Rectilinear Parallelogram	Vocabulary: 2D Shape 3D Shape Corners Sides Vertices Edges Faces Net Angles Acute Obtuse Right angle Reflex Rotation Degrees Opposite Circumference Radius Diameter



Summer 1			Summer 2		
Geometry- Position and direction (2 weeks)	Statistics (2 weeks)	Consolid -ation (SATs)	Consolidation	Consolidation	
 describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane reflect shapes using both the x and y-axis 	 interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average. 		Themed work Projects Revisit and revise.	Themed work Projects Revisit and revise	
Vocabulary: Coordinate x-axis y-axis Quadrants Positive Negative Translate Reflect Symmetrical	Vocabulary: Bar chart Pictogram Frequency table Tally chart Pie chart Discrete data Continuous data Line graph Sum Difference Comparison Interpret Mean Average				

