MATHS CURRICULUM Y6

	AUTUMN	SPRING	SUMMER
Y6	**NUMBER: Place Value** • *Read, write (order and compare) numbers to 10 000 000 and determine the value of each digits* • *round any whole numbers to a required degree of accuracy* • *Use negative numbers in context and calculate intervals across zero I can solve number problems and practical problems that involve all of the above* **NUMBER: Addition, Subtraction, Multiplication and Division** • *Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why* • *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 to the context* • *Divide numbers up to 4 digits by a two-digit whole number using the formal written method of short division where appropriate, interpreting remainders according to the context* • *Perform mental calculations, including mixed operations and large numbers* • *solve problems involving addition, subtraction, multiplication and division* • *Perform mental calculations, including with mixed operations and large numbers* • *Identify common factors, common multiples and prime numbers I can use knowledge of the order of operations to carry out calculations involving the four operations* • *Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy* **NUMBER: Fractions A** • *Use common factors to simplify fractions; use common multiples to express fractions in the same denomination* • *Compare and order fractions, including fractions > 1* **NUMBER: Fractions B** • *Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions*	**Number: Ratio** • *Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts* • *Solve problems involving the calculation/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* **NUMBER: Algebra** • *Use simple formulae* • *generate and describe linear number sequences* • *Express missing number problems algebraically* • *Find pairs of numbers that satisfy an equation with two unknowns I can enumerate possibilities of combinations of two variables* **NUMBER: Fractions, Decimals and Percentages** • *Identify the value of each digit in three digit numbers given to three decimal places* • *Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts* • *Associate a fraction with division and calculate a decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]* **MEASUREMENT: Perimeter, Area and Volume** • *Recognise that shapes with the same areas can have different perimeters and vice versa* • *Recognise when it is 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 and cubic metres, and extending to other units* **STATISTICS** • *Interpret and construct pie charts and line graphs and use these to solve problems* • *Calculate and interpret the mean as an average*	**GEOMETRY: Shape** • Draw 2-D shapes using given dimensions and angles Compare and classify geometric shapes based on their properties and sizes • Find unknown angles and lengths in 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 • Recognise and build simple 3-D shapes, including making nets **GEOMETRY: Position and Direction** • Describe positions on the full coordinate grid (all four quadrants) • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

	• *Multiply simple pairs of proper fractions, writing the answer in its simplest form* • *Divide proper fractions by whole numbers* **MEASUREMENT: Converting Units** • *Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places 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 up to 3 decimal places* • *Convert between miles and kilometres*		