

Year 6 Key Objectives	
<p>Number and Place Value</p> <ul style="list-style-type: none"> - Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit - Use negative numbers in context and calculate intervals across zero - Round any number to a required degree of accuracy - Solve number problems and practical problems 	<p>Number –additions, subtraction, multiplication and division</p> <ul style="list-style-type: none"> - Multiply multi-digit numbers up to 4 digits by two-digit whole numbers using formal written methods - Divide up to 4 digits by two-digit whole numbers using formal written methods and interpret remainders as whole numbers, fractions and rounding in context using both long division and short division - Use mental calculations including mixed operations and large numbers - Identify common factors, common multiples and prime numbers - Use knowledge of order of operations to carry out calculations involving all 4 operations including brackets - Solve multi-step addition and subtraction problems in contexts - Solve problems involving all four operations - Use estimation to check answers and use appropriate level of accuracy to context
<p>Statistics</p> <ul style="list-style-type: none"> - Interpret and construct pie charts and line graphs and use these to solve problems - Calculate and interpret the mean as an average - Make connections between angles, fractions and percentages to pie charts - Draw graphs relating 2 variables 	
<p>Geometry – properties of shape</p> <ul style="list-style-type: none"> - Draw 2-D shapes using given dimensions and angles - Recognise, describe and build simple 3-D shapes including nets - Compare and classify geometric shapes based on properties and sizes and find unknown angles - Illustrate and name parts of circles including radius, diameter and circumference - Recognise angles where they meet at a point are on a straight line, vertically opposite and find missing angles - Express relationships algebraically e.g. $d=2r$ 	<p>Measurement</p> <ul style="list-style-type: none"> - Solve problems involving the calculation and conversion of units of measure including decimals to three decimal places - Use, read, write and convert between standard units e.g. length, mass, volume, time - Convert between miles and KM - Recognise shapes with the same area can have different perimeters and vice versa - Recognise when it is possible to use a formulae for area and volume - Calculate the area of parallelograms and triangles - Calculate, estimate and compare volume of cubes and cuboids using standard units
<p>Ratio and Proportion</p> <ul style="list-style-type: none"> - Solve problems involving relative sizes of 2 quantities and find missing values using integer multiplication and division facts - Solve problems involving calculation of percentages and use of percentages for comparison - Solve problems involving similar shapes where the scale factor is known/ can be found - Solve problems using unequal sharing and grouping using knowledge of fractions and multiples - Link percentages or 360 degree angles to pie charts 	<p>Fractions (including decimals and percentages)</p> <ul style="list-style-type: none"> - Use common factors to simplify fractions; use common multiples to express fractions in same denomination - Compare and order fractions including fractions >1 - Add and subtract fractions with different denominators and mixed numbers (equivalent fractions) - Multiply simple pairs of proper fractions and write answer in simplest form - Divide proper fractions by whole numbers - Associate a fraction with division and show decimal equivalent - Identify the value of each digit in numbers to 3 decimal places and multiply/divide numbers by 10, 100, 1000.

	<ul style="list-style-type: none"> - Multiply one digit numbers with 2 decimal places by whole numbers - Use written division methods where the answer has up to 2 decimal places - Solve problems which require answers to be rounded - Recall and use equivalences between simple fractions, decimals and percentages in different contexts - Use a range of images to support their understanding - Understand the relationship between unit fractions and division to find a whole quantity. E.g. $\frac{1}{4} = 36\text{cm}$, whole length = 36×4
<p>Algebra</p> <ul style="list-style-type: none"> - 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 - Enumerate possibilities of combinations of two variables - Including missing numbers, lengths, coordinates and angles - Including generalisations of number patterns - Including equivalent expressions 	<p>Geometry – position and direction</p> <ul style="list-style-type: none"> - Describe position on a full coordinate grid (four quadrants) - Draw and translate simple shapes on the coordinate plane and reflect them in the axes - Draw and label pairs of axes with equal scaling in all four quadrants - Draw and label rectangles, parallelograms and rhombuses specified by coordinates