Year 6		End of Year Expectations
Using and Applying	**Problem Solving**	- I can solve number problems and practical problems involving a range of ideas - I can solve number problems and practical problems involving negative numbers - I can solve problems which require the knowing percentage and decimal equivalents of 1/2, '/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25. - I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. - I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. - I can use written division methods in cases where the answer has up to 2 decimal places solve problems which require answers to be rounded to specified degrees of accuracy. - I can use my knowledge of the order of operations to carry out calculations involving the 4 operations. - I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate. - I can solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts. - I can solve problems involving similar shapes where the scale factor is known or can be found. - I can solve problems involving the calculation of percentages (for example, of measures such as 15% of 360) and the use of percentages for comparison - I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Number	**Place Value**	- I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit - I can round any whole number to a required degree of accuracy. - I can use negative numbers in context, and calculate intervals across 0.
	Fractions and Decimals	- I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination. - I can compare and order fractions, including fractions >1. - I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. - I can multiply simple pairs of proper fractions, writing the answer in its simplest form.

		- I can divide proper fractions by whole numbers. **- I can associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction.** **- I can identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places.** **- I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.** **I can use written division methods in cases where the answer has up to two decimal places.**

Year 6		End of Year Expectations
Calculating	**Addition and Subtraction**	- I can perform mental calculations, including with mixed operations and large numbers. - I can use my knowledge of the order of operations to carry out calculations involving the 4 operations. - I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
	Multiplication and Division	- I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. - I can 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. - I can perform mental calculations, including with mixed operations and large numbers. - I can identify common factors, common multiples and prime numbers. - I can multiply one-digit numbers with up to 2 decimal places by whole numbers.
Geometry	**Properties of Shape**	- I can draw 2-D shapes using given dimensions and angles recognise, describe and build simple 3-D shapes, including making nets. - I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons. - I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. - I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
	Position and Direction	- I can describe positions on the full coordinate grid (all 4 quadrants). - I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

		- I can 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 3 decimal places. - I can convert between miles and kilometres. - I can recognise that shapes with the same areas can have different perimeters and vice versa. - I can recognise when it is possible to use formulae for area and volume of shapes - I can calculate the area of parallelograms and triangles - I can calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres and cubic metres (and extending to other units (for example, mm³ and km³).

Year 6	End of Year Expectations
Statistics	- I can interpret and construct pie charts and line graphs and use these to solve problems. - I can calculate and interpret the mean as an average.
Algebra	- I can use simple formulae - I can express missing number problems algebraically. - I can find pairs of numbers that satisfy an equation with 2 unknowns - I can enumerate possibilities of combinations of 2 variables. - I can generate and describe linear number sequences.
Ratio and Proportion	- I can solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts. - I can solve problems involving similar shapes where the scale factor is known or can be found. - I can solve problems involving the calculation of percentages (for example, of measures such as 15% of 360) and the use of percentages for comparison - I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.