Year 6 Maths Programme of Study

Hailey Church of England Primary School

We will find pairs of numbers that satisfy numbers sentences involving two unknowns.	We will use estimation to check answers to calculations.					
We will generate and describe linear number sequences.	We will solve problems involving any operation.	We will solve ratio and proportion problems involving unequal sharing and grouping.			We will draw 2D shapes using given dimensions and angles.	
We will use simple formulae expressed in words.	We will solve addition and subtraction multi-step problems.	We will solve ratio and proportion problems involving the relative sizes of two quantities, including similarity.	We will recall and use equivalences between simple fractions, decimals and percentages	We will calculate, estimate and compare the volume of cubes and cuboids using standard units, including centimetre cubed and cubic metres.	We will draw and translate simple shapes and reflect them in the axes.	We will convert kilometres to miles using a graphical representation.
We will express missing number problems algebraically.	We will use knowledge of the order of operations to carry out calculations involving the four operations.	We will divide proper fractions by whole numbers (e.g. 1/3÷2=1/6).	We will solve problems involving the calculation of percentages of whole numbers or measures such as 15% of 360.	I recognise when it is necessary to use the formulae for area and volume of shapes.	We will describe positions on a full co-ordinate grid (all four quadrants).	We will draw graphs relating two variables.
We will solve number problems and practical problems.	We will identify common factors, common multiples and prime numbers.	We will multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1/4X1/2=1/8).	We will solve problems which require answers to be rounded to specified degrees of accuracy.	We will calculate the area of parallelograms and triangles.	We will find unknown angles where they meet at a point, are on a straight line, and are vertically opposite.	We will calculate and interpret the mean as an average.
We will calculate intervals across '0' when using negative numbers.	We will calculate mentally, including with mixed operations and large numbers.	We will add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.	We will use written division methods in cases where the answer has up to 2 decimal places.	We will recognise that shapes with the same areas can have different perimeters and vice versa.	We will illustrate and name parts of circles, including radius, diameter and circumference.	We will construct line graphs.
We will use negative numbers in context.	We will interpret remainders as whole number remainders, fractions, or by rounding.	We will associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3/8).	We will multiply one-digit numbers with up to 2 decimal places by whole numbers.	We will convert between miles and kilometres.	We will find unknown angles in any triangles, quadrilaterals and regular polygons.	We will interpret line graphs.
We will round any whole number.	We will divide numbers up to 4 digits by a 2-digit whole number using an efficient written method.	We will compare and order fractions, including fractions >1.	We will multiply and divide numbers by 10, 100 and 1000 where the answers are up to 3 decimal places.	I use, read, write and convert between standard units of measure.	We will compare and classify geometric shapes based on their properties and sizes.	We will construct pie charts.
We will read, write, order and compare numbers up to 10,000,000.	We will multiply multi-digit numbers up to 4 digits by a 2-digit whole number using a written method	We will use common factors to simplify fractions and use common multiples to express fractions in the same denomination.	We will identify the value of each digit to three decimal places.	We will solve problems involving the calculation and conversion of units of measure, using decimal notation to 3 decimal places where appropriate.	We will recognise, describe and build simple 3-D shapes, including making nets.	We will interpret pie charts.
NUMBER & ALGEBRA	**ADDITION, SUBTRACTION, MULTIPLICATION & DIVISION**	**FRACTIONS, RATIOS AND PROPORTION**	**FRACTIONS, DECIMALS AND PERCENTAGES**	**MEASURES**	**GEOMETRY**	**DATA**