

■ Number and Place Value

■ Calculations

■ Fractions, decimals and percentages

■ Ratio and proportion

...read, write, order and compare numbers up to 10,000,000.

...use negative numbers in context and calculate intervals across zero.

...determine the value of each digit in numbers up to 10,000,000.

...solve number and practical problems using my knowledge of number and place value.

...round any whole number to a required degree of accuracy.

...use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

...solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

...identify common factors, common multiples and prime numbers.

...perform mental calculations, including with mixed operations and large numbers.

...multiply multi-digit numbers up to a 4 digit by 2 digit whole number using the formal written method of long multiplication.

...divide numbers up to 4 digits by a 2 digit number using the formal written method of short division where appropriate.

...divide numbers up to 4 digits by a 2 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.

...solve problems involving addition, subtraction, multiplication and division.

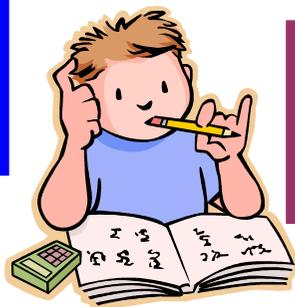
...use my knowledge of the order of operations to carry out calculations involving the four operations.

...solve problems involving similar shapes where the scale factor is known or can be found out.

...solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

...solve problems involving the relative sizes of two quantities, where missing values can be found using integer multiplication and division facts.

...solve problems involving the calculation of percentages and the use of percentage comparisons.



The Year 6 Mathematician 'I can...'

...solve problems which require answers to be rounded to specific degrees of accuracy.

...recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

...use common factors to simplify fractions and use common multiples to express fractions in the same denomination.

...use written division methods in cases where the answer has up to 2 decimal places.

...compare and order fractions, including fractions >1 .

...multiply 1 digit numbers with up to 2 decimal places by whole numbers.

...add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

...identify the value of each digit to 3 decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places.

...multiply simple pairs of proper fractions, writing the answer in the simplest form.

...associate a fraction with division to calculate decimal fraction equivalents for a simple fraction.

...divide proper fractions by whole numbers.

Algebra

Measurement

Geometry - properties of shapes

Geometry - position and direction

Statistics

...express missing number problems algebraically.

...use a simple formula.

...calculate and interpret the mean as an average.

...interpret and construct pie charts and line graphs and use these to solve problems.

...generate and describe linear number sequences.

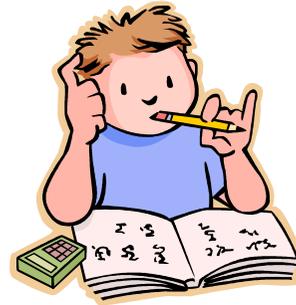
...find pairs of numbers that satisfy an equation with two unknowns.

...describe positions on the full co-ordinate grid (all four quadrants).

...enumerate possibilities of combinations of two variables.

...draw and translate simple shapes on the co-ordinate plane and reflect them in the axes.

...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 of up to 3 decimal places.



...know that the diameter is twice the radius.

...illustrate and name parts of circles, including radius, diameter and circumference.

The Year 6 Mathematician 'I can...'

...convert between miles and kilometres.

...recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles.

...calculate the area of parallelograms and triangles.

...recognise that shapes with the same areas can have different perimeters and vice versa.

...recognise when it is possible to use the formulae for the volume of shapes.

...find unknown angles in any triangles, quadrilaterals and regular polygons.

...recognise when it is possible to use the formulae for the area of shapes.

...solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.

...draw 2D shapes given dimensions and angles.

...recognise and build simple 3D shapes, including making nets.

...calculate, estimate and compare the volume of cubes and cuboids, using standard units.

...compare and classify geometric shapes based on their properties and sizes.

...describe simple 3D shapes.