



Number and Place Value					
Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit					
Round any whole number to a required degree of accuracy					
Use negative numbers in context, and calculate intervals across zero					
Solve number and practical problems that involve all of the above.					
Addition, Subtraction, Multiplication & Division					
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 number using the formal written method of short division where appropriate, interpreting remainders according to the context					
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					
Perform mental calculations, including with mixed operations and large numbers					
Identify common factors, common multiples and prime numbers					
Use their knowledge of the order of operations to carry out calculations involving the four operations					
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why					
Solve problems involving addition, subtraction, multiplication and division					
Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.					
Ratio, Proportion & Algebra					
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 of percentages [for example, of measures, and such as 15% of 360] and the 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.					
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.					

Fractions (including decimals and percentages)					
Use common factors to simplify fractions; use common multiples to express fractions in the same denomination					
Compare and order fractions, including fractions > 1					
Add fractions with different denominators and mixed numbers, using the concept of equivalent fractions					
Subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions					
Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]					
Divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]					

Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]					
Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places					
Multiply one-digit numbers with up to two decimal places by whole numbers					
Use written division methods in cases where the answer has up to two decimal places					
Solve problems which require answers to be rounded to specified degrees of accuracy					
Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.					
Measures					
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 from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places					
Use, read, write and convert between standard units, converting measurements of mass from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places					
Use, read, write and convert between standard units, converting measurements of volume from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places					
Use, read, write and convert between standard units, converting measurement time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places					
Convert between miles and kilometres					
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 using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units [for example, mm ³ and km ³].					
Calculate, estimate and compare volume of cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units [for example, mm ³ and km ³].					

Geometry (Properties of Shape)					
Draw 2-D shapes using given dimensions and angles					
Recognise, describe and build simple 3-D shapes, including making nets					
Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any 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.					
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.					
Statistics					
Interpret and construct pie charts and use these to solve problems					
Interpret and construct line graphs and use these to solve problems					
Calculate and interpret the mean as an average.					