

Number and Place Value
Read, write, order and compare numbers to at least 10,000,000 (ten million) and say the value of each digit.
Round any number to a required degree of accuracy.
Use negative numbers in context when looking at temperature or money.
Show an understanding of place value including decimals .
Addition and Subtraction
Mentally calculate using a mix of the four operations.
Solve problems with more than one step and operation.
Solve addition and subtraction word and practical problems.
Use estimation to check answers to calculations and determine an appropriate degree of accuracy.
Multiplication and Division
Multiply numbers of up to 4 digits by a two-digit number using a formal written method.
Divide numbers of up to 4 digits by a two-digit number using “chunking” recording remainders as fractions.
Divide numbers of up to 4 digits by a two-digit – rounding answers if necessary.
Mentally calculate using a mix of the four operations and increasingly large numbers.
Identify common factors, multiples and prime numbers.
Use the order of importance of the four operations when answering questions (B rackets, O rder, D ivision, M ultiplication, A ddition, S ubtraction).
Solve addition and subtraction multi-step problems.
Fractions
Use common factors and multiples to simplify fractions and express fractions in the same denomination.
Compare and order fractions including those <1
Add and subtract fractions with different denominators and mixed numbers.
Multiply simple pairs of proper fractions, writing the answer in the simplest form such as $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$.
Divide proper fractions by whole numbers such as $\frac{1}{3} \div 2 = \frac{1}{6}$.
Link a fraction with division and work out decimal fractions such as 0.378 is $\frac{3}{8}$ as a simple fraction.
Explain the place value of any digit in a number with up to 3 decimal places and multiply or divide these by 10, 100 or 1000.
Multiply numbers with up to 2 decimal places by whole numbers.
Use written division methods for numbers with up to two decimal places.
Use equivalences between simple fractions, decimals and percentages.
Measurement
Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three places.
Read, write and convert between standard units.
Convert between miles and kilometres.
Recognise that shapes with the same areas can have different perimeters and vice versa.
Find the areas or volumes of shapes (including parallelograms and triangles).
Calculate, estimate and compare volumes of cubes and cuboids.
Properties of Shapes
Draw 2-D shapes using dimensions given.
Recognise, describe and build simple 3-D shapes, including making nets
Compare and classify shapes based on their properties and sizes.
Find unknown angles in any triangles, quadrilaterals or regular polygons.
Illustrate and name parts of circles, including radius, diameter and circumference. 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. Find any missing angles .
Position and Direction
Describe positions in all four quadrants on a full coordinate graph.
Draw and translate simple shapes on the coordinate plane and reflect these in the axis.
Statistics
Interpret and construct pie charts and line graphs.
Calculate and interpret the mean as an average.
Ratio and Proportion
Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three places.
Solve problems involving the calculation of percentages and use percentages for comparisons.
Solve problems involving shapes where the scale factor is known or can be found.
Algebra
Use simple formulae.
Create and describe number sequences.