



Year 6- Maths Objectives for Coverage

Place Value: Represent	Read, write, (order and compare) numbers up to 10,000,000 and determine the value of each digit
Place Value: Use and compare	(Read, write), order and compare numbers up to 10,000,000 and determine the value of each digit
Place Value: Problems and Rounding	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 and Subtraction: Calculation	Perform mental calculations, including with mixed operations and large numbers
	Use their knowledge of the order of operations to carry out calculations involving the four operations (BODMAS)
Addition and Subtraction: Solve Problems	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
Multiplication and Division: Recall, Represent, Use	Identify common factors, common multiples and prime numbers
	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
Multiplication and Division: Calculations	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using long multiplication
	Divide numbers up to 4 digits by a two-digit whole number using 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
Multiplication and Division: Solve Problems	Solve problems involving addition, subtraction, multiplication and division
Multiplication and Division: Combined Operations	Use their knowledge of BODMAS to carry out calculations involving the four operations
Fractions: Compare	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
	Compare and order fractions, including fractions >1
Fractions: Calculations	Add and 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
	Divide proper fractions by a whole number
Decimals: Recognise and Write	Identify the value of each digit in numbers given to three decimal places
Decimals: Calculations and Problems	Multiply and divide by 10, 100 and 1000 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
Fractions, Decimals and Percentages	Associate a fraction with division and calculate decimal equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)
	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Ratio and Proportion	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 (e.g. of measures) such as 15% of 360 and use the 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 the knowledge of fractions and multiples
Algebra	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

Measurement: Using 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, volume, mass and time from a smaller unit to a larger unit, and vice versa, using decimal notation up to three decimal places
	Convert between miles and kilometres
Measurement: Time	Use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit and vice versa
Measurement: Perimeter, Area, Volume	Recognise that shapes with the same area 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 and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units (e.g. mm^3 and km^3)
Geometry: 2-D Shapes	Draw 2-D shapes using given dimensions and angles
	Compare and classify geometric shapes based on their properties and sizes
	Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
Geometry: 3-D Shapes	Recognise, describe and build simple 3-D shapes, including making nets
Geometry: Angles and Lines	Find unknown angles in any triangles, quadrilaterals and regular polygons
	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: Present and Interpret	Interpret and construct pie charts and line graphs and use these to solve problems
Statistics: Solve problems	Calculate and interpret the mean as an average