

Year 5- Maths Objectives for Coverage

Place Value: Counting	Count forwards or backwards in steps of 10 for any given number up to 1,000,000
	Count forwards and backwards with positive and negative whole numbers, including through zero
Place Value: Represent	Read, write (order and compare) numbers to at least 1,000,000 and determine the value of each digit
	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals
Place Value: Use and compare	(Read, write) Order and compare numbers to at least 1,000,000 and determine the value of each digit
Place Value: Problems and Rounding	Interpret negative numbers in context
	Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000
	Solve number problems and practical problems that involve all of the above
Addition and Subtraction: Recall, Represent, Use	Use rounding to check the answers to calculations and determine, in the context of a problem, levels of accuracy
Addition and Subtraction: Calculation	Add and subtract whole numbers with more than 4 digits, including using formal written methods (column)
	Add and subtract numbers mentally with increasingly large numbers
Addition and Subtraction: Solve Problems	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 and a combination of these including understanding the meaning of the equals sign
Multiplication and Division: Recall, Represent, Use	Identify multiples and factors including finding all factor pairs of a number and common factors of two numbers
	Know and use the vocabulary of prime factors and composite numbers
	Establish whether a number up to 100 is prime and recall prime numbers up to 19
	Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3)
Multiplication and Division: Calculations	Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers
	Multiply and divide numbers mentally drawing upon known facts
	Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
	Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
Multiplication and Division: Solve Problems	Solve problems involving multiplication and division using their knowledge of factors and multiples, squares and cubes
	Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
Multiplication and Division: Combined Operations	Solve problems involving addition, subtraction, multiplication and division and a combination of these including understanding the meaning of the equals sign
Fractions: Recognise and Write	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $>$ as a mixed number (e.g. $2/5 + 4/5 = 6/5$ or 1 and $1/5$)
Fractions: Compare	Compare and order fractions whose denominators are all multiples of the same number
Fractions: Calculations	Add and subtract fractions with the same denominator and denominators that are multiples of the same number
	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
Decimals: Recognise and Write	Read and write decimal numbers as fractions (e.g. $0.71 = 71/100$)
	Recognise and use thousandths and related them to tenths, hundredths and decimal equivalents
Decimals: Compare	Round decimals with two decimal places to the nearest whole number and to one decimal places
	Read, write, order and compare numbers with up to three decimal places
Decimals: Calculations and Problems	Solve problems involving numbers up to three decimal places
Fractions, Decimals and Percentages	Recognise the percent symbol (%) and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with 100 as the denominator and as a decimal
	Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25

Measurement: Using Measures	Convert between different units of metric measure (e.g. km and m; cm and m, cm and mm, g and kg, l and ml)
	Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
	Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scaling
Measurement: Money	Use all four operations to solve problems involving measure (e.g. money)
Measurement: Time	Solve problems involving converting between units of measure
Measurement: Perimeter, Area, Volume	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
	Calculate and compare the area of rectangles (including squares), including the use of standard units, square centimetres and square metres and estimate the area of irregular shapes
	Estimate volume (e.g. using 1cm^3 blocks to build cuboids, including cubes) and capacity (e.g. using water)
Geometry: 2-D Shapes	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
	Use the properties of rectangles to deduce related facts and find the missing lengths and angles
Geometry: 3-D Shapes	Identify 3-D shapes, including cubes and other cuboids, from 2-D representations
Geometry: Angles and Lines	Know that angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
	Draw given angles and measure them in degrees
	Identify: <ul style="list-style-type: none"> • Angles at a point and one whole turn • Angles at a point on a straight line and half a turn • Other multiples of 90 degrees
Geometry: Position and Direction	Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language and know that the shape has not changed
Statistics: Present and Interpret	Complete, read and interpret information in tables, including timetables
Statistics: Solve problems	Solve comparison, sum and difference problems using information presented in a line graph