

Maths Curriculum Overview 2024 - Key stage 3

Year 7	Groups	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
2	1	Place value: counting, writing and partitioning number. Addition and subtraction: working with 2 digit numbers and missing number problems.	Addition and subtraction: continuing to work with 2 digits and problem solving. Shape: describing 2D and 3D shapes and use of symmetry.	Money: counting coins and notes, making amounts and finding change. Multiplication and division: developing tables knowledge, halving, doubling and then dividing by 2, 5 and 10.	Length and height: measuring in cm and m, comparing and ordering measurements. Mass: measure in g and kg and compare masses. Capacity: measure in mm and l and temperature	Fractions; working with halves, quarters and thirds. Time: Reading O' clocks, quarter past/to and half past and telling the time to 5 minutes.4	Statistics: Making tallies, reading tables and drawing and interpreting pictograms. Position and direction: describing position, movement and turns.
		Sequences: describing and continuing sequences. Understand and use algebraic notation: understanding function machines, finding inputs and outputs and substituting values. Equality and equivalence: understanding equality and equivalence and solving using inverse operations.	Place value and ordering integers and decimals: working within one billion, comparing using signs, ordering numbers and working with decimals. Fractions, decimals and percentage equivalence: represent and convert between fractions and decimals (tenths and hundredths) and convert simple fractions percentages and decimals.	Solving problems with addition and subtraction: use formal methods for addition and subtraction and solve problems involving perimeter, finance and time. Fractions and percentages of amounts: Finding fraction of amounts and percentage of amounts.	Operations and equations with directed numbers: use and order directed numbers, four rules with directed numbers. Addition and subtraction of fractions: convert between fractions and mixed numbers. Add and subtract fractions with a range of denominators.	Constructing, measuring and using geometric notation: understanding notation, measuring and classifying angles and types of triangles, quadrilaterals and polygons. Developing geometric reasoning: understanding and using angles on a line, at a point, in a triangle and a quadrilateral.	Developing number sense. Sets and probability. Prime numbers and proofs.

Year 8	Groups	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Problem Solving
3	2	Place value: counting, writing and partitioning number. Addition and subtraction: working with 2 digit numbers and missing number problems.	Addition and subtraction: continuing to work with 2 digits and problem solving. Shape: describing 2D and 3D shapes and use of symmetry.	Money: counting coins and notes, making amounts and finding change. Multiplication and division: developing tables knowledge, halving, doubling and then dividing by 2, 5 and 10.	Length and height: measuring in cm and m, comparing and ordering measurements. Mass: measure in g and kg and compare masses. Capacity: measure in mm and l and temperature	Fractions; working with halves, quarters and thirds. Time: Reading O' clocks, quarter past/to and half past and telling the time to 5 minutes.4	Statistics: Making tallies, reading tables and drawing and interpreting pictograms. Position and direction: describing position, movement and turns.
		Place value: representing and partitioning numbers up to 10,000, finding more or less and comparing and ordering numbers. Addition and subtraction: adding and subtracting 4 digit numbers and using estimation and checking strategies.	Area: Counting squares, making shapes and comparing areas. Multiplication and division: Extending times tables knowledge and applying to division questions.	Multiplication and division: Multiplying and dividing by 10 and 100. Multiplying and dividing up to 3 digits by 1 digit. Length and perimeter: measure in m and km, find equivalent lengths, find perimeters of rectangles and other polygons. Fractions: partition mixed numbers, compare and order, convert between improper and mixed numbers.	Fractions: find equivalent fractions and add and subtract fractions and mixed numbers. Decimals: Use tenths and hundredths, divide numbers by 10 and 100.	Decimals: partition, order and compare decimals. Money: convert between £ and p, compare amounts, solve problems and use estimation. Time: work with a range of time units and convert between 12 and 24 hour clock.	Shape: identify, compare and order angles and identify triangles, quadrilaterals and polygons. Statistics: interpret charts and draw and interpret line graphs. Position and direction: Use and plot coordinates and use translations.
		Place value: roman numerals, numbers to a million, powers of 10 and rounding. Addition and subtraction: working to four digits, multi-step problems and finding missing numbers. Multiplication and division: multiples, factors and prime numbers.	Multiplication and division: squares, cubes and multiplying and dividing by 10, 100 and 1,000. Fractions: Equivalent fraction, converting between mixed and improper fractions and adding fractions.	Multiplication and division: multiplying by 2 digit numbers and developing short division techniques. Fractions: multiplying fractions by integers and calculating fractions of amounts and quantities.	Fractions, decimals and percentages: finding equivalent fractions and decimals, working with thousandths, ordering and comparing decimals, rounding, switching between fractions, decimals and percentages. Perimeter and area: Perimeters of rectangles and polygons and areas of rectangles and compound shapes. Statistics: reading and interpreting graphs, tables and timetables.	Shape: classifying, estimating and measuring angles. Calculating angles around a point and on a straight line. Position and direction: Working with coordinates, translating, lines of symmetry and reflecting over lines. Decimals: adding and subtracting decimals, sequences and multiplying and dividing by 10, 100 and 1,000.	Negative numbers: Counting through zero, compare and ordering negative numbers and finding the difference. Converting numbers: working with g/kg, mm/cm, converting lengths and between imperial and metric, converting units of time and calculating with timetables. Volume: using cubic centimetres and estimating and compare volumes.

Year 9	Groups	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Problem Solving
2	1	Place value: representing and partitioning numbers up to 10,000, finding more or less and comparing and ordering numbers. Addition and subtraction: adding and subtracting 4 digit numbers and using estimation and checking strategies.	Area: Counting squares, making shapes and comparing areas. Multiplication and division: Extending times tables knowledge and applying to division questions.	Multiplication and division: Multiplying and dividing by 10 and 100. Multiplying and dividing up to 3 digits by 1 digit. Length and perimeter: measure in m and km, find equivalent lengths, find perimeters of rectangles and other polygons. Fractions: partition mixed numbers, compare and order, convert between improper and mixed numbers.	Fractions: find equivalent fractions and add and subtract fractions and mixed numbers. Decimals: Use tenths and hundredths, divide numbers by 10 and 100.	Decimals: partition, order and compare decimals. Money: convert between £ and p, compare amounts, solve problems and use estimation. Time: work with a range of time units and convert between 12 and 24 hour clock.	Shape: identify, compare and order angles and identify triangles, quadrilaterals and polygons. Statistics: interpret charts and draw and interpret line graphs. Position and direction: Use and plot coordinates and use translations.
		Ratio and scale: understanding ratio, simplify ratios, problem solving and comparing ratios and fractions. Multiplicative change: Exploring proportion and conversion graphs and draw and interpret scale diagrams. Multiplying and dividing fractions: finding the product of fractions, understanding reciprocals and dividing pairs of fractions.	Working in the Cartesian plane: using coordinates in all four quadrants, recognising and using lines, exploring gradients and plotting graphs of $y=mx+c$. Representing data: draw and interpret scatter diagrams, using lines of best fit and reading and interpreting frequency tables. Tables and probability: Finding probabilities from sample spaces, two-way tables and Venn diagrams.	Brackets, equations and inequalities: multiply and factorise with single brackets and solve equations with brackets and use inequalities. Sequences: generate sequences using algebraic rules. Indices: add and subtract expressions with sequences and use addition and subtraction laws for sequences.	Fractions and percentages: convert between fractions, decimals and percentages, calculate increases and decreases, express one number as a fraction or percentage of another and solve percentage problems. Standard index form: work with positive and negative powers of 10, add, subtract, multiply and divide numbers in standard form and use of a calculator. Number sense: rounding to powers of 10 and significant figures, calculate using BIDMAS and convert metric units of length, weight and capacity.	Sequences: describing and continuing sequences. Understand and use algebraic notation: understanding function machines, finding inputs and outputs and substituting values. Equality and equivalence: understanding equality and equivalence and solving using inverse operations.	The data handling cycle: design questionnaires, draw and interpret pictograms, bar charts vertical line charts, pie charts and line graphs. Find the range and compare distributions. Measures of location: understand mean, median and mode, identify outliers and compare distributions.