



Year 1 Maths Curriculum Overview

Unit	Autumn Term	Spring Term	Summer Term
Place Value	➤ read and write numbers from 1 to 10 in numerals and words ➤ identify and represent numbers using objects and pictorial representations including the number line use the language of: equal to, more than, less than (fewer), most, least ➤ identify one more and one less numbers within 10.	➤ read and write numbers from 10 to 20 in numerals and words ➤ identify and represent numbers using objects and pictorial representations including the number line use the language of: equal to, more than, less than (fewer), most, least ➤ identify one more and one less numbers within 20 and 50.	➤ count in multiples of twos, fives and tens given a number, ➤ count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number count, ➤ read and write numbers to 100 in numerals ➤ identify one more and one less numbers within 100
Addition and Subtraction	➤ read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs represent and use number bonds and related subtraction facts within 10	➤ read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs represent and use number bonds and related subtraction facts within 20 and 50. ➤ solve one-step problems involving addition and subtraction, using concrete objects and pictorial representations, and missing number problems ➤ add and subtract one-digit and two-digit numbers to 20 and 50, including zero	➤ read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs represent and use number bonds and related subtraction facts within 100
Multiplication and Division			➤ solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher
Fractions		➤ recognise, find and name a half as one of two equal parts of an object, shape or quantity	➤ recognise, find and name a quarter as one of four equal parts of an object, shape or quantity
Measurement	➤ compare, describe and solve practical problems for lengths and heights ➤ measure and begin to record lengths and heights ➤ compare, describe and solve practical problems for mass/weight ➤ measure and begin to record mass/weight measure	➤ compare, describe and solve practical problems for capacity and volume ➤ measure and begin to record capacity and volume.	➤ compare, describe and solve practical problems for time measure and begin to record time (hours, minutes, seconds)



Money		➤	➤ recognise and know the value of different denominations of coins and notes ➤ solve simple practical problems involving money
Time	➤ sequence events in chronological order using language ➤ recognise and use language relating to dates, including days of the week, weeks, months and years.	➤ tell the time to the hour	➤ tell the time to the half past the hour and draw the hands on a clock face to show these times
Geometry: Shape	➤ recognise and name common 2-D shapes. ➤ sort common 2-D shapes. ➤ patterns with 2-D shapes.	➤ recognise and name common 3-D shapes. ➤ sort common 3-D shapes. ➤ patterns with 3D shapes.	
Geometry: Position and Direction			➤ describe position, direction and movement, including whole, half, quarter and three-quarter turns



Year 2 Maths Curriculum Overview

Unit	Autumn	Spring	Summer
Number: Place Value	➤ count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward ➤ recognise the place value of each digit in a two-digit number (tens, ones) ➤ read and write numbers to at least 100 in numerals and in words ➤ Recognise the place value of each digit in a two-digit number (tens, ones)	➤ identify, represent and estimate numbers using different representations ➤ use place value and number facts to solve problems	➤ compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs
Number: Addition and Subtraction	➤ add and subtract numbers using concrete objects pictorial representations and mentally including a two digit number and ones, a two digit number and tens, two two-digit numbers, adding three one-digit numbers.	➤ recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100. ➤ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. ➤ Applying their increasing knowledge of mental and written methods.	➤ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot ➤ solve addition and subtraction problems using concrete objects, pictorial representations, including those involving numbers, quantities and measures.
Number: Multiplication and Division	➤ recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. ➤ show that multiplication of two numbers can be done in any order (commutative)	➤ Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplications, division and equals signs. ➤ recognise division as grouping and sharing	➤ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts including problems in contexts.
Number: Fractions	➤ recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	➤ write simple fractions for example, $\frac{1}{2}$ of $6 = 3$	➤ recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$
Measurement	➤ choose and use appropriate standard units to estimate and measure length/height ➤ measure to the nearest appropriate unit using rulers, scales,	➤ choose and use appropriate standard units to estimate and measure mass ➤ compare and order lengths mass, volume/capacity and record the results using $<$, $>$ and $=$	➤ choose and use appropriate standard units to estimate and measure temperature capacity
Measurement: Money	➤ recognise and use symbols for pounds (£) and pence (p)	➤ combine amounts to make a particular value	➤ find different combinations of coins that equal the same amounts of money



			➤ solve simple problems in a practical context involving addition and subtraction of the same unit, including giving change.
Measurement: Time	➤ know the number of minutes in an hour and the number of hours in a day.	➤ tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.	➤ compare and sequence intervals of time
Statistics Statistics	➤ interpret and construct simple pictograms ➤ ask and answer questions about totals	➤ interpret and construct tally charts, block diagrams and simple tables. ➤ ask and answer questions about differences	➤ ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
Geometry: Properties of Shape	➤ identify and describe the properties of 2-D shapes including the number of sides and line symmetry in a vertical line.	➤ identify and describe the properties of 3-D shapes including the number of edges, vertices and faces. ➤ Identify 2D shapes on the surface of a 3D shapes (for example a circle on a cylinder and a triangle on a pyramid)	➤ compare and sort common 2-D and 3-D shapes and everyday objects
Geometry: Position and Direction	➤ order and arrange combinations of mathematical objects in patterns and sequences	➤ use mathematical vocabulary to describe position direction	➤ describe movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti clockwise) ➤ use mathematical vocabulary to describe movement.



Year 3 Curriculum Overview

Unit	Autumn	Spring	Summer
Number: Place Value	➤ recognise the place value of each digit in a three-digit number (hundreds, tens, ones) ➤ compare and order numbers up to 1,000	➤ identify, represent and estimate numbers using different representations	
Number: Place Value	➤ count from 0 in multiples of 4, 8, 50 and 100; ➤ find 10 or 100 more or less than a given number ➤ read and write numbers up to 1,000 in numerals and in words		➤ solve number problems and practical problems involving these ideas
Number: Addition and Subtraction	➤ add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens a three-digit number and hundreds ➤ add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	➤ Estimate the answer to a calculation and use inverse operations to check answers	➤ Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. ➤
Number: Multiplication and Division	➤ recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	➤ write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	➤ solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects
Number: Fractions	➤ count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 ➤ recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators ➤ Compare and order unit fractions, and fractions with the same denominator.	➤ Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	➤ recognise and show, using diagrams, equivalent fractions with small denominators ➤ Solve problems that involve all of the above.
Measurement	➤ measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	➤ measure the perimeter of simple 2-D shapes	➤ add and subtract amounts of money to give change, using both £ and p in practical contexts ➤



	➤		
Measurement: Time	➤ tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	➤ know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events	➤ estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours
Geometry: Properties of Shape	➤ recognise angles as a property of shape or a description of a turn	➤ draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	➤ identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; ➤ identify whether angles are greater than or less than a right angle
Geometry: Properties of Shape	➤	➤ identify horizontal and vertical lines and pairs of perpendicular and parallel lines	
Statistics	➤ interpret and present data using bar charts, pictograms and tables	➤ solve one-step and two-step questions (for example, "How many more?" and "How many fewer?") using information presented in scaled bar charts and pictograms and tables	➤ revisit interpretation and problem solving with data – non statutory.



Year 4 Maths Curriculum Overview

NC Area	Autumn Term	Spring Term	Summer Term
Number – Place Value	➤ Count in multiples of 6, 7, 9, 25 and 1,000 ➤ Find 1,000 more or less than a given number ➤ Count backwards through zero	➤ Recognise the place value of each digit in a four-digit number ➤ Order and compare numbers beyond 1,000 ➤ Identify, represent and estimate numbers using different representations	➤ Round numbers to the nearest 10, 100 and 1,000 ➤ Solve number and practical problems involving place value ➤ Read Roman numerals to 100 and know that the numeral system changed to include the concept of zero and Place value.
Number – Addition & Subtraction	➤ Add and subtract numbers with up to four digits using formal written methods ➤ Estimate and use inverse operations to check answers	➤ Solve two-step addition and subtraction problems ➤ Interpret and solve problems in contexts	➤ Pupils continue to practise both mental methods and columnar addition and subtraction with increasingly large numbers to aid fluency (Non statutory) ➤ Solve two-step addition and subtraction problems ➤ Interpret and solve problems in contexts
Number – Multiplication & Division	➤ Recall multiplication and division facts up to 12×12 ➤ Use place value and known facts to multiply and divide mentally including multiplying by 0 and 1/multiplying 3 numbers together ➤ Recognise factor pairs and commutativity ➤ Multiply and divide by 10 and 100 ➤ Informal written methods for multiplication	➤ Multiply two-digit and three-digit numbers by a one-digit number using formal written methods ➤ Divide using efficient methods and interpret remainders	➤ Solve multiplication and division problems ➤ Apply multiplication facts to reasoning and problem-solving tasks ➤ Solve problems involving multiplication and adding, including using distributive law to multiply two digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as objects/n and connected objects m.
Fractions (including decimals and percentages)	➤ Recognise and show families of common equivalent fractions using diagrams and representations ➤ Count up and down in hundredths ➤ Recognise hundredths arising from dividing an object or quantity by 100 and dividing tenths by 10. ➤ Solve problems involving increasingly harder fractions to calculate quantities and fractions to divide quantities, including non-unit	➤ Add and subtract fractions with the same denominator ➤ Solve problems involving fractions ➤ Compare and order fractions – mixed numbers ➤ Recognise and write decimal equivalents of tenths and hundredths ➤ Recognise and write decimal equivalents of fractions of $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ ➤ Find the effect of dividing a one digit or 2 digit number by 10/100, identifying the value	➤ Compare and order decimals with up to two decimal places ➤ Round decimals with one decimal place to the nearest whole number ➤ Solve simple measure and money problems involving decimals



	fractions where the answer is a whole number	of the digits in the answer as ones, tenths and hundredths.	
Measurement	➤ ➤ Convert between different units of measure ➤ Estimate, compare and calculate measures ➤	➤ Measure and calculate perimeter of rectilinear figures (including squares) in cm/m ➤ Find the area of rectilinear shapes by counting squares. ➤	➤ Estimate, compare and calculate different measures, including money in pounds and pence ➤ Read, write and convert between analogue and digital 12/24hr clock ➤ Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days
Geometry – Properties of Shape	➤ Compare and classify geometric shapes ➤ Identify acute and obtuse angles ➤	➤ Compare and order angles up to two right angles ➤	➤ Identify lines of symmetry ➤ Complete symmetrical figures
Geometry – Position & Direction	➤ Describe positions on a 2D grid ➤ Describe movements between positions including a given unit, left/right/up/down ➤	➤ Read write and use pairs of coordinates (non-statutory) ➤ Plot specified points and draw sides to complete shapes	➤
Statistics	➤ Interpret and present discrete and continuous data using charts and graphs ➤ Solve comparison, sum and difference problems using information presented in graphs and tables	➤ Interpret and present discrete and continuous data using charts and graphs ➤ Solve comparison, sum and difference problems using information presented in graphs and tables	➤ Use of a broader range of scales in representations (non-statutory) ➤ Solve comparison, sum and difference problems using information presented in graphs and tables ➤ Pupils begin to relate the graphical representation of data to record change over time (non-statutory/can be taught in science)



Year 5 Maths Curriculum Overview

NC Area	Autumn Term	Spring Term	Summer Term
Number – Place Value	➤ Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit ➤ Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 ➤ Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero ➤ Read Roman numerals to 1000 (M) and recognise years written in Roman numerals	➤ Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 ➤ Solve number problems and practical problems that involve all of the above	➤ Solve number problems and practical problems that involve all of the above
Number – Addition & Subtraction	➤ Add and subtract numbers mentally with increasingly large numbers ➤ Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	➤ Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why ➤ Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy ➤ Check answers to calculations using the inverse operation	➤ Solve addition and subtraction multi-step problems in contexts deciding which operations and methods to use
Number – Multiplication & Division	➤ 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 numbers, 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 notation (^{2} and ^{3})	➤ Multiply numbers up to 4 digits by a one or two digit number using a formal written method ➤ Divide numbers up to 4 digits by a one digit number using short division and interpret remainders appropriately ➤ Multiply and divide whole numbers and decimals by 10, 100 and 1000	➤ Solve problems involving multiplication and division including factors, multiples, squares and cubes ➤ Solve problems involving addition, subtraction, multiplication and division and combinations of these ➤ Solve problems involving scaling by simple fractions and simple rates
Fractions (including decimals and percentages)	➤ Compare and order fractions whose denominators are multiples of the same number ➤ Identify, name and write equivalent fractions	➤ Add and subtract fractions with denominators that are multiples of the same number ➤ Read, write, order and compare numbers with up to three decimal places	➤ Multiply proper fractions and mixed numbers by whole numbers. ➤ Solve problems involving decimal numbers



	➤ Recognise mixed numbers and improper fractions and convert from one form to the other. ➤ Add and subtract fractions with the same denominator ➤ Recognise and use thousandths and relate them to tenths and hundredths	➤ Round decimals to one decimal place ➤ Recognise the percent symbol (%) and understand percent as parts per hundred ➤ Write percentages as fractions and decimals	➤ Solve problems which require knowing percentage and decimal equivalents of common fractions ➤ Apply fractions, decimals and percentages in problem solving contexts
Measurement	➤ Convert between different units of metric measure ➤ Measure and calculate the perimeter of composite rectilinear shapes	➤ Calculate and compare the area of rectangles including squares ➤ Estimate volume and capacity	➤ Solve problems involving converting between units of metric measure ➤ Apply knowledge of perimeter, area and volume in problem solving contexts
Geometry – Properties of Shape	➤ Identify 3D shapes from 2D representations	➤ Know angles are measured in degrees and estimate and compare angles ➤ Measure angles in degrees ➤ Draw given angles and measure them in degrees	➤ Identify angles at a point (360°) and on a straight line (180°) ➤ Use properties of rectangles to deduce missing angles and lengths
Geometry – Position & Direction	➤	➤ Describe positions on the first quadrant of a coordinate grid ➤ Identify, describe and represent position following reflection and translation	➤ Apply knowledge of translation and reflection in problem solving contexts
Statistics	➤ Complete, read and interpret information in tables	➤ Read and interpret line graphs ➤ Solve comparison, sum and difference problems using information presented in line graphs ➤ Solve one-step and two-step questions using information presented in charts, tables and line graphs	➤ Read and interpret timetables



Year 6 Curriculum Overview Map

Unit	Autumn	Spring	Summer
Number: Place Value	➤ Read, and write numbers up to 10,000,000 and determine the value of each digit ➤ 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 place value
Number: Addition and Subtraction	➤ perform mental calculations, including with mixed operations and large numbers	➤ use knowledge of the order of operations to carry out calculations involving the four operations ➤ use estimation to check answers to calculations and determine, in context, an appropriate degree of accuracy.	➤ solve multi-step addition and subtraction problems in context, deciding which operations and methods to use
Number: Multiplication and Division	➤ Identify common factors, multiples and primes. ➤ multiply multi-digit numbers up to 4 digits by a two-digit whole number using formal written methods	➤ divide numbers up to 4 digits by a two-digit whole number using formal (short and long) written methods, interpreting remainders as whole numbers or by rounding, as appropriate for the context	➤ solve problems involving all four operations, including using simple formulae and integer scaling
Number: Fractions	➤ use common factors to simplify fractions; use common multiples to express fractions in the same denomination ➤ compare and order fractions, including fractions >1 ➤ 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 ➤ multiply a simple fraction by a whole number ➤ divide proper fractions by whole numbers ➤ Divide numbers using formal methods interpreting remainders as fractions	



Number: Decimals	➤ read and write decimal numbers up to three decimal places ➤ Add and subtract decimals. ➤ 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 involving decimals and rounding to specified degrees of accuracy ➤ associate a fraction with division and calculate decimal fraction equivalents	
Number: Percentages		➤ link, recall and use equivalences between simple fractions, decimals and percentages including in different contexts ➤ solve problems involving the calculation of percentages and the use of percentages for comparison	
Number: Ratio and Proportion	➤ solve problems involving the relative sizes of two quantities, including recipes and scaling	➤ solve problems involving similar shapes where the scale factor is known or can be found	➤ solve problems involving unequal and grouping using knowledge of fractions and multiples
Number: Algebra	➤ generate and describe linear number sequences ➤ use simple formulae	➤ express missing number problems algebraically ➤ find pairs of numbers that satisfy an equation with two unknown ➤ enumerate possibilities of combinations of two variables	
Measurement	➤ Use, read, write, convert and problem solve involving metric units of measure (length, mass, volume and time), using decimal notation up to 3 d.p. where appropriate	➤ calculate and compare the area and perimeter of shapes recognising that shapes can have the same area but different perimeters and vice versa	



	➤ Convert between miles and kilometres	➤ calculate the area of parallelograms and triangles ➤ calculate, estimate and compare volume of cubes and cuboids using standard units ➤ recognise when it is possible to use formulae for area and volume of shapes	
Geometry: Properties of Shape including angles	➤ recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles ➤ compare and classify geometric shapes based on their properties and sizes ➤ draw 2-D shapes accurately using given dimensions and angles	➤ find unknown angles in any triangles, quadrilaterals and regular polygons ➤ recognise, describe and build simple 3-D shapes, including making nets ➤ illustrate and name parts of circles, including radius, diameter and circumference; know that the diameter is twice the radius	➤ consolidate problem solving across number, geometry, measurement and statistics with increasing complexity
Geometry: Position and Direction	➤ describe positions on the full coordinate grid (all four quadrants) ➤ solve problems involving co-ordinates	➤ draw and translate simple shapes on the coordinate plane, and reflect them in the axes	➤ solve problems involving position, direction and movement
Statistics	➤ calculate and interpret the mean as an average	➤ interpret and construct pie charts and line graphs and use these to solve problems	➤ solve comparison, sum and difference problems using information presented in a variety of graphical forms