

# Year 2 Maths Curriculum Overview

Topic	National Curriculum Objectives	Term Covered	Vocabulary	Key Problem Solving Strategies	Useful Resources
Place Value: Counting	⇒ Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	Autumn 1	More, less, greatest, least, tens, ones, group, whole, part, number sentence, place value, place value columns	Skip counting in 2s, 3s, 5s and 10s; using part-whole models, tens frames, bead strings	Bead strings, straws, base 10 equipment, tens frames, number lines, number tracks, numicon, part-whole models, counters, place value grids, place value counters, counting sticks, hundred squares
Place Value: Represent	⇒ Read and write numbers to at least 100 in numerals and in words ⇒ Identify, represent and estimate numbers using different representations, including the number line	Autumn 1	Tens, ones, group, whole, part, number sentence, calculation, place value, place value columns, estimate	Partitioning; skip counting in 2s, 3s, 5s and 10s; using part-whole models, tens frames, bead strings	Bead strings, straws, base 10 equipment, tens frames, number lines, number tracks, numicon, part-whole models, counters, place value grids, place value counters, counting sticks, hundred squares
Place Value: Use PV and Compare	⇒ Recognise the place value of each digit in a two-digit number (tens and ones) ⇒ Compare and order numbers from 0 up to 100; use $<$ , $>$ and $=$ signs	Autumn 1	Greatest, least, tens, ones, group, whole, part, number sentence, calculation, place value, place value columns, more than, less than, equal to, greater than, fewer, most	Partitioning; skip counting in 2s, 3s, 5s and 10s; using part-whole models, tens frames, bead strings	Bead strings, straws, base 10 equipment, tens frames, number lines, number tracks, numicon, part-whole models, counters, place value grids, place value counters, counting stick, hundred squares
Place Value: Problems & Rounding	⇒ Use place value and number facts to solve problems	Autumn 1	Greatest, least, tens, ones, group, whole, part, number sentence, calculation, place value, place value columns, more than, less than, equal to, greater than, fewer, most	Partitioning; skip counting in 2s, 3s, 5s and 10s; using part-whole models, tens frames, bead strings	Bead strings, straws, base 10 equipment, tens frames, number lines, number tracks, numicon, part-whole models, counters, place value grids, place value counters, counting sticks, hundred squares
Addition & Subtraction: Recall, Represent, Use	⇒ Recall and use addition and subtraction facts to 20 fluently	Autumn 2	Take away, subtract, add, sum, part, whole, number sentence,	Partitioning; drawing images of base 10; counting forwards and	Part-whole models, bar models, number lines, base 10 equipment, tens frames,

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	<p>and derive and use related facts up to 100</p> <p>⇒ Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p> <p>⇒ Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</p>		<p>number fact family, inverse, greater than, less than, equal to, total, sum, altogether, difference, calculation, tens, ones, more, less, partition, exchange, value</p>	<p>backwards; using part-whole models, bar models, number lines, known number bonds, column addition, column subtraction, concrete manipulatives</p>	<p>bead strings, number tracks, hundred squares</p>
Addition & Subtraction: Calculations	<p>⇒ Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <p>⇒ A two-digit number and ones</p> <p>⇒ A two-digit number and tens</p> <p>⇒ Two two-digit numbers</p> <p>⇒ Adding three one-digit numbers</p>	Autumn 2	<p>Take away, subtract, add, sum, part, whole, number sentence, number fact family, inverse, greater than, less than, equal to, total, sum, altogether, difference, calculation, tens, ones, more, less, partition, exchange, value</p>	<p>Partitioning; drawing images of base 10; counting forwards and backwards; using part-whole models, bar models, number lines, the inverse to check, known number bonds, column addition, column subtraction, concrete manipulatives</p>	<p>Part-whole models, bar models, number lines, base 10 equipment, tens frames, bead strings, number tracks, hundred squares</p>
Addition & Subtraction: Solve Problems	<p>⇒ Solve problems with addition and subtraction:</p> <p>⇒ Using concrete objects and pictorial representations, including those involving numbers, quantities and measures</p> <p>⇒ Applying their increasing knowledge of mental and written methods</p>	Autumn 2	<p>Take away, subtract, add, sum, part, whole, number sentence, number fact family, inverse, greater than, less than, equal to, total, sum, altogether, difference, calculation, tens, ones, more, less, partition, exchange, value</p>	<p>Partitioning; counting forwards and backwards; drawing images of base 10; using part-whole models, bar models, number lines, concrete manipulatives, using the inverse to check, using known number bonds, column addition, column subtraction,</p>	<p>Part-whole models, bar models, number lines, base 10 equipment, tens frames, bead string, number tracks, hundred squares</p>
Multiplication & Division: Recall Represent, Use	<p>⇒ Recall and use multiplication and division facts for the 2, 5</p>	Autumn 4 Spring 1	<p>Equal groups, unequal groups, repeated</p>	<p>Skip counting in 2s, 3s, 5s and 10s; using</p>	<p>Objects or similar, arrays, number tracks, cubes,</p>

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	<p>and 10 multiplication tables, including recognising odd and even numbers</p> <p>⇒ Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p>		<p>addition, multiply, divide, total, equal to, number sentence, 'lots of', group, share, half, double, odd, even, times table, multiple</p>	<p>times tables facts, repeated addition, number tracks, bar models, number lines</p>	<p>number pieces, bar models, hundred squares, base 10 equipment, number lines, tens frames</p>
Multiplication & Division: Calculations	<p>⇒ Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs</p>	<p>Autumn 4 Spring 1</p>	<p>Equal groups, unequal groups, repeated addition, multiply, divide, total, equal to, number sentence, 'lots of', group, share, half, double, times table, multiple</p>	<p>Skip counting in 2s, 3s, 5s and 10s; using times tables facts, repeated addition, number tracks, bar models, number lines</p>	<p>Counters, objects or similar, arrays, number tracks, cubes, number pieces, bar models, hundred squares, base 10 equipment, number lines, tens frames</p>
Multiplication & Division: Solve Problems	<p>⇒ Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</p>	<p>Autumn 4 Spring 1</p>	<p>Equal groups, unequal groups, repeated addition, multiply, divide, total, equal to, number sentence, 'lots of', group, share, half, double, times table, multiple, array</p>	<p>Skip counting in 2s, 3s, 5s and 10s; using times tables facts, repeated addition, arrays, number tracks, bar models, number lines</p>	<p>Objects or similar, arrays, number tracks, cubes, number pieces, bar models, hundred squares, base 10 equipment, number lines, tens frames</p>
Fractions: Recognise and Write	<p>⇒ Recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</p>	<p>Spring 4</p>	<p>Whole, part, equal, unequal, half, fraction, numerator, denominator, divide, value, quarter, third, unit fraction, non-unit fraction</p>	<p>Shading; folding shapes/strips; sharing objects between hoops or similar; using number lines, bar models, counting sticks</p>	<p>2-D shapes, objects or similar, paper plates, hoops, containers, ribbons/strips of paper, bar models, Cuisenaire rods, number lines, counting sticks</p>
Fractions: Compare	<p>⇒ Recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></p>	<p>Spring 4</p>	<p>Whole, part, equal, unequal, half, fraction, numerator, denominator, divide, value, quarter, third, unit fraction, non-unit fraction, equivalent</p>	<p>Shading; folding shapes/strips; sharing objects between hoops or similar; using number lines, bar models, counting sticks</p>	<p>2-D shapes, objects or similar, paper plates, hoops, containers, ribbons/strips of paper, bar models, Cuisenaire rods, number lines, counting sticks</p>

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Fractions: Calculations	⇒ Write simple fractions for example, $\frac{1}{2}$ of 6 = 3	Spring 4	Whole, part, equal, unequal, half, fraction, numerator, denominator, divide, value, quarter, third, unit fraction, non-unit fraction, equivalent, calculation, equal to	Shading; folding shapes/strips; sharing objects between hoops or similar; using number lines, bar models, counting sticks	2-D shapes, objects or similar, paper plates, hoops, containers, ribbons/strips of paper, bar models, Cuisenaire rods, number lines, counting sticks
Algebra	⇒ Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems ⇒ (Note – although algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives from Y1/2/3)	-	-	-	-
Measurement: Using Measures	⇒ Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels ⇒ Compare and order lengths, mass, volume/capacity and record the results using >, < and =	Spring 5 Summer 4	Centimetre, metre, length, height, measure, estimate, longer, shorter, taller, longest, shortest, tallest, operation, heavier, lighter, heaviest, lightest, more, less, the same as, balance scales, mass, weigh, grams, kilograms, quarter full, half full, three quarters full, capacity, millilitres, litres, scale, volume, temperature, degrees centigrade, Celsius, unit of measurement, increased, decreased, warmer, colder, difference	Skip counting in 2s, 5s and 10s; using rulers, tape measures, bar models, balance scales, weighing scales, thermometers, number line knowledge to read scales on containers	Rulers, tape measures, bar models, balance scales, weighing scales, weights, objects to measure, containers, bottles, thermometers

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Measurement: Money	<ul style="list-style-type: none"> <li>⇒ Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li> <li>⇒ Find different combinations of coins that equal the same amounts of money</li> <li>⇒ Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</li> </ul>	Autumn 3	Amount, total, difference, value, pounds, pence, greater, more, less, fewer, equal to, add, subtract, plus, take away, minus	Skip counting in 2s, 5s, 10s and 20s; partitioning; regrouping; counting on; using bar models, part-whole models, base 10 equipment	Coins, notes, part-whole models, bar models, base 10 equipment
Measurement: Time	<ul style="list-style-type: none"> <li>⇒ Compare and sequence intervals of time</li> <li>⇒ 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</li> <li>⇒ Know the number of minutes in an hour and the number of hours in a day</li> </ul>	Summer 3	Hour, half past, hour hand, minute hand, quarter to, quarter past, clock face, minute, hour, day, duration, longer, shorter, longest, shortest	Skip counting in 5s; using physical clocks, (empty) number lines	Clocks, (empty) number lines
Geometry: 2-D Shapes	<ul style="list-style-type: none"> <li>⇒ Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</li> <li>⇒ Identify 2-D shapes on the surface of 3-D shapes ,[for example, a circle on a cylinder and a triangle on a pyramid]</li> <li>⇒ Compare and sort common 2-D shapes and everyday objects</li> </ul>	Spring 3	2-D shapes, circle, square, rectangle, triangle, pentagon, hexagon, heptagon, octagon, faces, curved surfaces, sides, vertex, vertices, symmetry, symmetrical, unsymmetrical, half	Folding paper shapes; making shapes out of lollypop sticks or similar; using practical shapes, geo-boards with elastic bands, mirrors	2-D shapes, 3-D shapes, lollypop sticks, geo boards, elastic bands, mirrors, paper shapes, real life objects in simple 3-D shapes
Geometry: 3-D Shapes	<ul style="list-style-type: none"> <li>⇒ Recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]</li> </ul>	Spring 3	2-D shapes, circle, square, rectangle, triangle, pentagon, hexagon, heptagon,	Folding paper shapes; making shapes out of lollypop sticks or similar; using practical	2-D shapes, 3-D shapes, lollypop sticks, geo boards, elastic bands, mirrors, paper shapes, real life

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	⇒ Compare and sort common 3-D shapes and everyday objects		octagon, 3-D shapes, cone, pyramid, cube, cuboid, cylinder, prism, faces, curved surfaces, vertex, vertices, apex, edges, symmetry, symmetrical, unsymmetrical, half	shapes, geo-boards with elastic bands, mirrors	objects in simple 3-D shapes
Geometry: Position & Direction	⇒ Order and arrange combinations of mathematical objects in patterns and sequence ⇒ Use mathematical vocabulary to describe position, direction and movement, including 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)	Spring 3 Summer 1	Pattern, sequence, position, size, copy, forwards, backwards, up, down, left, right, movements, direction, full turn, half turn, quarter turn, three-quarter turn, clockwise, anticlockwise	Children practically moving objects and themselves	2-D grids, objects
Statistics: Present and Interpret	⇒ Interpret and construct simple pictograms, tally charts, block diagrams and simple tables	Spring 2	Tally charts, total, altogether, more, less, difference, pictograms, column, row, half, data	Skip counting in 2s, 5s and 10s; drawing pictograms; building pictograms with concrete manipulatives; using tally charts	Tally charts, counters/cubes
Statistics: Solve Problems	⇒ Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ⇒ Ask and answer questions about totalling and comparing categorical data	Spring 2	Tally charts, total, altogether, more, less, difference, pictograms, column, row, half, data	Skip counting in 2s, 5s and 10s; drawing pictograms; building pictograms with concrete manipulatives; using tally charts	Tally charts, counters/cubes