

## Maths Overview KS1 and KS2

### Year 1

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Unit</b>	Place Value	Addition and Subtraction Shape	Place Value (within 20) Addition and Subtraction	Place Value (within 50) Mass and Volume	Multiplication and Division Fractions Geometry	Place Value (within 100) Measurement (money) Measurement (time)
<b>Small Steps</b>	Sort objects, count objects, count objects from a larger group, represent objects, recognise numbers as words, count on from any number, 1 more, count backwards within 10, 1 less, compare groups by matching, fewer more same, less than greater than equal to, compare numbers, order objects and numbers, the number line,	Introduce parts and wholes, part-whole model, write number sentences, fact families - addition facts, number bonds within 10, systematic number bonds within 10, number bonds to 10, addition - add together, addition - add more, addition problems, find a part, fact families - the eight facts, subtraction - take away/cross out (how many left?), take away, subtraction on a number line, add or subtract Recognise and name 3-D shapes, sort 3-D shapes, recognise and name 2-D shapes, Sort 2-D shapes, patterns with 2-D and 3-D shapes.	Count within 20, understand 10, understand 11,12 and 13, understand 14, 15, 16, understand 17, 18, 19, understand 20, I more and 1 less, the number line to 20, use a number line to 20, estimate on a number line to 20, compare numbers to 20, order numbers to 20 Add by counting on within 20, add ones using number bonds, doubles, near doubles, subtract ones using number bonds, subtraction - counting back, subtraction - finding the difference, related facts, missing number problems	Count from 20 to 50, 20,30,40 and 50, count by making groups of tens, groups of tens and ones, partition into tens and ones, the number line to 50, estimate on a number line to 50, 1 more 1 less Compare length and heights, measure length using objects, measure length using centimetres Heavier and lighter, measure mass, compare mass, full and empty, compare volume, measure capacity, compare capacity	Small steps to be added in Spring Term	Small steps to be added in Spring Term
<b>Vocabulary (new for the year group)</b>	Sort, represent, partitioning, ones, tens	Addition, subtraction, difference, equals, facts, problems, missing number problems, 2-digit number, inverse	Sort, represent, partitioning, ones, tens, Addition, subtraction, difference, equals, facts, problems, missing number problems, 2-digit number, inverse	Sort, represent, partitioning, ones, tens Mass, volume	Multiples, multiplication, division, arrays Whole, half, quarter, equal parts Sides, corners, properties, pyramids, faces, position, direction, movement, whole turn, quarter turn, half turn, three-quarter turn	Sort, represent, partitioning, ones, tens Compare Chronological order, days of the week, months of the year, month, year, o'clock, half past, second Money, coins, notes, pounds (£), pence (p)

Year 2

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Unit</b>	Place value	Addition and Subtraction	Money Multiplication and Division	Length and Height Mass, capacity and temperature Shape	Statistics Fractions	Position and Direction Time
<b>Small Steps</b>	Numbers to 20, count objects to 100 by making 10s, recognise tens and ones, use a place value chart, partition numbers to 100, write numbers to 100 in words, flexibly partition numbers to 100, write numbers to 100 in expanded form, 10s on the number line to 100, 10s and 1s on the number line to 100, estimate numbers on a number line, compare objects, compare numbers, count in 2s, 5s and 10s, count in 3s,	Bonds to 10, fact families - addition and subtraction bonds within 20, related facts, bonds to 100 (tens) , add and subtract 1s, add by making 10, add three 1-digit numbers, add to the next 10, add across a 10, subtract across 10, subtract from 10, subtract a 1-digit number from a 2-digit number, 10 more and 10 less, add and subtract 10s, add 2-digit numbers, subtract 2-digit numbers, subtract two 2-digit numbers, mixed addition and subtraction, compare number sentences, missing number problems	Count money - pence, count money - pounds (notes and coins), count money - pounds and pence, choose notes and coins, make the same amount, compare amounts of money, calculate with money, make a pound, find change, two-step problems Recognise equal groups, make equal groups, add equal groups, introduce the multiplication symbol, multiplication sentences, use arrays, make equal groups- grouping, make equal groups - sharing, the 2 times-table, divide by 2, doubling and halving, odd and even numbers, the 10 times-table, divide by 10, the 5 times-table, divide by 5, the 5 and 10 times-table	Measure in centimetres, measure in metres, compare lengths and heights, order lengths and heights, four operations with lengths and heights Compare mass, measure in grams, measure in kilograms, four operations with mass, compare volume and capacity, measure in millilitres, measure in litres, four operations with volume and capacity, temperature Recognise 2-D and 3-D shape, count sides on 2-D shapes, count vertices on 2-D shapes, draw 2-D shapes, lines of symmetry on shapes, use lines of symmetry to complete shapes, sort 2-D shapes, count faces on 3-D shapes, count edges on 3-D shapes, count vertices on 3-D shapes, Sort 3-D shapes, make patterns with 2-D and 3-D shapes	Small steps to be added in Spring Term	Small steps to be added in Spring Term
<b>Vocabulary (new for the year group)</b>	Count in steps, count in multiples, place value, estimate	Sum, 3-digit number, commutative	Value, change Multiplication tables, commutative, repeated addition	Standard units, estimate, order, record results, centimetre (cm), metre (m) Kilogram (kg), gram (g), quarter full, three quarters full, litres (l), millilitres (ml),	Pictograms, tally chart, block diagram, category, sorting, totalling, comparing, horizontal, vertical Three quarters, third, equivalent fractions, unit fractions, non-unit	Clockwise/ anti-clockwise, straight line, rotation, arrange, sequences Intervals of time, quarter past/to, duration

				temperature, Celsius Pentagon, hexagon, lines of symmetry, cylinder, edges, vertices, vertex	fractions, numerator, denominator, one whole	
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### Year 3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Place value Addition and Subtraction	Addition and Subtraction Multiplication and Division	Multiplication and Division Length and Perimeter	Fractions Mass and Capacity	Fractions Money Time	Shape Statistics
Small Steps	Represent numbers to 100, partition numbers to 100, number line to 100, hundreds, represent numbers to 1,000, partition numbers to 1,000, flexible partitioning of numbers to 1,000, hundreds, tens and ones, find 1, 10 or 100 more or less, number line to 1,000, estimate on a number line to 1,000, compare numbers to 1,000, order numbers to 1,000, count in 50s Apply number bonds within 10, add and subtract 1s, add and subtract 10s, add and subtract 100s, spot the pattern., add 1s across a 100, subtract 1s across a 10, subtract 10s across a 100, make connections	Add two numbers, subtract two numbers, add 2-digit and 3-digit numbers, subtract a 2-digit number from a 3-digit number, complements to 100, estimate answers, inverse operations, make decisions Multiplication - equal groups, use arrays, multiples of 2, multiples of 5 and 10, sharing and grouping, multiply by 3, divide by 3, the 3 times-table, multiply by 4, divide by 4, the 4 times-table, multiply by 8, divide by 8, the 8 times-table, the 2,4 and 8 times-tables	Multiples of 10, related calculations, reasoning about multiplication, multiply a 2-digit number by a 1-digit number, link multiplication and division, divide a 2-digit number by a 1-digit number, remainders, scaling, how many ways? Measure in metres and centimetres, measure in millimetres, measure in centimetres and millimetres, metres, centimetres and millimetres, equivalent lengths, compare lengths, add lengths, subtract lengths, what is perimeter? , measure perimeter, calculate perimeter	Understand the denominators of unit fractions, compare and order unit fractions, understand the numerators of non-unit fractions, understand the whole, compare and order non-unit fractions, fractions and scales, fractions on a number line, count in fractions on a number line, equivalent fractions on a number line, equivalent fractions as bar models Use scales, measure mass in grams, measure mass in kilograms and grams, compare mass, add and subtract mass, measure capacity and volume in millimetres, measure capacity and volume in litres and millilitres, equivalent capacities and volumes, compare capacity and volume, add and subtract capacity and volume	Small steps to be added in Spring Term	Small steps to be added in Spring Term

<b>Vocabulary</b> (new for the year group)	Ascending, descending, 10 or 100 more, 10 or 100 less, hundreds Column addition, column subtraction, exchange, estimate	Exchange, mathematical statements, missing number problems, integer scaling problems, correspondence problems, derived facts	Millimetre (m), perimeter	Tenths	Tenths Analogue clock, roman numerals, 12-hour clock, 24-hour clock, a.m./p.m. , noon, midnight, leap year, digital	Right-angle triangles, heptagon, octagon, polygon, properties, prism. Orientations, angles, acute angle, obtuse angle, turn, right angles, half turn, three quarters of a turn, greater than right angle, less than right angle, horizontal lines, vertical lines, perpendicular lines, parallel lines Table, bar chart, one-step problem, two-step problem
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#### Year 4

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Unit</b>	Place Value Addition and Subtraction	Area Multiplication and Division	Multiplication and Division Length and Perimeter	Fractions Decimals	Decimals Money Time	Shape Statistics Position and Direction
<b>Small Steps</b>	Represent numbers to 1,000, partition numbers to 1,000, number line to 1,000, thousands, represent numbers to 10,000, partition numbers to 10,000, flexible partitioning of numbers to 10,000, find 1,10,100,1,000 more or less, number line to 10,000, estimate on a number line to 10,000, compare numbers to 10,000, order numbers to 10,000, roman numerals, round to the nearest 10, round to the nearest 100, round to the	What is area, count squares, make shapes, compare areas Multiples of 3, multiply and divide by 6, 6 times-table and division facts, multiply and divide by 9, 9 times-table and division facts, the 3,6,9 times-tables, multiply and divide by 7, 7 times-table and division facts, 11 times-table and division facts, 12 times-table and division facts, multiply by 1 and 0, divide a number by 1 and itself, multiply three numbers	Factor pairs, use factor pairs, multiply by 10, multiply by 100, divide by 10, divide by 100, related facts - multiplication and division, informal written methods for multiplication, multiply a 2-digit number by a 1-digit number, divide a 2-digit number by a 1-digit number, divide a 3-digit number by a 1-digit number, correspondence problems, efficient multiplication Measure in kilometres and metres, equivalent lengths (km and m),	Understand the whole, count beyond 1, partition a mixed number, number lines with mixed numbers, compare and order mixed numbers, understand improper fractions, convert mixed numbers to improper fractions, convert improper fractions to mixed numbers, equivalent fractions on a number line, equivalent fraction families, add two or more fractions, add fractions and mixed numbers, subtract from	Small steps to be added in Spring Term	Small steps to be added in Spring Term

	nearest 1,000, round to the nearest 10,100, 1,000 Add and subtract 1s, 10s, 100s and 1,000s, add up to two 4-digit numbers, subtract two 4 digit numbers, efficient subtraction, estimate answers, checking strategies		perimeter on a grid, perimeter of a rectangle, perimeter of rectilinear shapes, calculate perimeter of rectilinear shapes, perimeter of regular polygons, perimeter of polygons	whole amounts, subtract from mixed numbers Tenths as fractions, tenths as decimals, tenths on a number line, divide a 1-digit number by 10, divide a 2-digit number by 10, hundredths as fractions, hundredths as decimals, hundredths on a place value chart, divide 1 or 2-digit number by 100		
<b>Vocabulary</b> (new for the year group)	Negative numbers, roman numerals, 1000 more, 1000 less, thousands, round 4-digit number, operations, method	Factor pairs, formal written layout, distributive law, remainders	Factor pairs, formal written layout, distributive law, remainders Kilometres (km), rectilinear figure, area	Decimal equivalence, hundredths, convert, proper fractions, improper fractions, decimal point	Decimal equivalence, hundredths, convert, proper fractions, improper fractions, decimal point Convert	Time graph, discrete data, continuous data, line graph, comparison problem, sum problem, difference problem, calculate, interpret Co-ordinates, first quadrant, fgrid, translation, plot, polygon, axis

### Year 5

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Unit</b>	Place value Addition and Subtraction	Multiplication and Division Fractions	Multiplication and Division Fractions	Decimals and Percentages Perimeter and area Statistics	Shape Position and Direction Decimals	Negative numbers Converting units Volume
<b>Small Steps</b>	Roman numerals to 1,000, numbers to 10,00, numbers to 100,000, numbers to 1,000,000, read and write numbers to 1,000,000, powers of 10, 10/100/1,000/ 10,000/ 100,000 more or less, partition numbers to 1,000,000, number line to 1,000,000, compare and order numbers to	Multiples, common multiples, factors, common factors, prime numbers, square numbers, cube numbers, multiply by 10,100,1,000, divide by 10,100, 1,000, multiples of 10, 100, 1,000 Find fractions equivalent to a unit fraction, find fractions equivalent to a	Multiply up to a 4-digit number by a 1-digit number, multiply a 2-digit number by a 2-digit number, multiply a 3-digit number by a 2-digit number, multiply a 4-digit number by a 2-digit number, solve problems with multiplication, short division, divide a 4-digit number by a 1-digit	Decimals up to 2 decimal places, equivalent fractions and decimals tenths), equivalent fractions and decimals (hundredths), equivalent fractions and decimals, thousandths as fractions, thousandths as decimals, thousandths on a place value chart, order and compare decimals, round	Small steps to be added in Spring Term	Small steps to be added in Spring Term

	<p>100,000, compare and order numbers to 1,000,000, round within 100,000, round within 1,000,000</p> <p>Mental strategies, add whole numbers with more than four digits, subtract whole numbers with more than four digits, round to check answers, inverse operations, multi-step addition and subtraction problems, compare calculations, find missing numbers</p>	<p>non-unit fraction, recognise equivalent fractions, convert improper fractions to mixed numbers, convert mixed numbers to improper fractions, compare fractions less than 1, order fractions less than 1, compare and order fractions greater than 1, add and subtract fractions with the same denominator, add fractions within 1, add fractions with total greater than 1, add to a mixed number, add two mixed numbers, subtract fractions, subtract from a mixed number, subtract from a mixed number breaking the whole, subtract two mixed numbers</p>	<p>number, divide with remainders, efficient division, solve problems with multiplication and division</p> <p>Multiply a unit fraction by an integer, multiply a non-unit fraction by an integer, calculate a fraction of a quantity, fraction of an amount, find the whole, use fractions as operators</p>	<p>to the nearest whole number, round to 1 decimal place, understand percentages, percentages as fractions, percentages as decimals, equivalent fractions</p> <p>Perimeter of rectangles, Perimeter of rectilinear shapes, perimeter of polygons, area of rectangles, area of compound shapes, estimate area</p> <p>Draw line graphs, read and interpret line graphs, read and interpret tables, two-way tables, read and interpret timetables</p>		
<b>Vocabulary</b> (new for the year group)	<p>Ten thousands, one hundred thousands, powers of, integer</p>	<p>Multiples, factors, prime numbers, square numbers, cube numbers, short division, product, dividend, divisor, quotient, operations</p>	<p>Fifth, thousandths, mixed numbers, per cent %, factors, integer, complements</p>	<p>Fifth, thousandths, mixed numbers, per cent %, factors, integer, complements</p> <p>Decimal notation, scaling, metric units, imperial units, inches, compound shape, irregular shapes, square centimetres, square metres</p> <p>Timetable, two-way tables</p>	<p>Reflection</p> <p>Regular polygon, irregular polygon, reflex angles, degrees, one whole turn, angles on a straight line, angles around a point, vertically opposite, missing angles</p>	

Year 6

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Unit</b>	Place value Addition and Subtraction, Multiplication and Division	Fractions Converting Units Fractions	Ratio Algebra Decimals	Fractions, decimals and percentages Area, Perimeter and Volume Statistics	Shape Position and Direction	Themed maths
<b>Small Steps</b>	Numbers to 1,000,000, numbers to 10,000,000, read and write numbers to 10,000,000, powers of 10, number line to 10,000,000, compare and order any integers, round any integer, negative numbers Add and subtract integers, common factors, common multiples, rules of divisibility, primes to 100, square and cube numbers, multiply up to 4-digit number by a 2-digit number, solve problems with multiplication, short division, division using factors, introduction to long division, long division with remainders, solve problems with division, solve multi-step problems, order of operations, mental calculations and estimation, reason from known facts	Equivalent fractions and simplifying, equivalent fractions on a number line, compare and order (denominator), compare and order (numerator), add and subtract simple fractions, add and subtract any two fractions, add mixed numbers, subtract mixed numbers, multi-step problems Metric measures, convert metric measures, miles and kilometres, imperial measures Multiply fractions by integers, multiply fractions by fractions, divide a fraction by an integer, divide any fraction by an integer, mixed questions with fractions, fraction of an amount, fraction of an amount - find the whole	Add or multiply, use ration language, introduction to the ratio symbol, ratio and fractions, scale drawing, use scale factors, similar shapes, ratio problems, proportion problems, recipes 1-step function machines, 2-step function machines, form expressions, substitution, formulae, form equations, solve 1-step equations, solve 2-step equations, find pairs of values, solve problems with two unknowns Place value within 1, place value - integers and decimals, round decimals, add and subtract decimals, multiply by 10, 100 and 1,000, divide by 10, 100 and 1,000, multiply decimals by integers, divide decimals by integers, multiply and divide decimals in context,	Decimal and fraction equivalents, fractions as division, understand percentages, fractions to percentages, equivalent fractions, decimals and percentages, order fractions, decimals and percentages, percentage of an amount - one step, percentage of an amount - multi-step, percentages - missing values Shapes - same area, area and perimeter, area of a triangle - counting squares, area of a right-angles triangle, area of any triangle, area of a parallelogram, volume - counting cubes, volume of a cuboid Line graphs, dual bar charts, read and interpret pie charts, draw pie charts, the mean	Small steps to be added in Spring Term	
<b>Vocabulary (new for the year group)</b>	Millions, ten millions Multi-digit numbers, long division	Conversion, miles, formulae, parallelograms, feet, cubic metre, cubic millimetre, cubic	Relative size, missing values, integer multiplication, percentages, scale	Pie chart, mean	Radius, diameter, circumference, dimensions Four quadrants, co-ordinate plane	

		kilometre, gallons, stones, ounces	factor, unequal sharing & grouping Formulae, linear number sequences, algebraically, equation, unknowns, combinations, variables			
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