



Year 1 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 1	Page reference
Number – number and place value	count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	6
	count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	4, 6, 7–9, 15
	given a number, identify one more and one less	6
	identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least	11–14
	read and write numbers from 1 to 20 in numerals and words	4
Number – addition and subtraction	read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	11, 16, 20
	represent and use number bonds and related subtraction facts within 20	17, 24
	add and subtract one-digit and two-digit numbers to 20, including zero	16–24
	solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$	33–34
Number – 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	25–28, 33–34
Number – fractions	recognise, find and name a half as one of two equal parts of an object, shape or quantity	29, 30, 32
	recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	29, 30, 32
Measurement	compare, describe and solve practical problems for:	
	<ul style="list-style-type: none"> lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] 	38
	<ul style="list-style-type: none"> mass/weight [for example, heavy/light, heavier than, lighter than] 	39
	<ul style="list-style-type: none"> capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] 	40
	<ul style="list-style-type: none"> time [for example, quicker, slower, earlier, later] 	44–45
	recognise and know the value of different denominations of coins and notes	36–37



Year 1 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 1	Page reference
Measurement <i>(continued)</i>	recognise and use language relating to dates, including days of the week, weeks, months and years	43
	tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	44–45
Geometry – properties of shapes	Recognise and name common 2-D and 3-D shapes, including:	
	<ul style="list-style-type: none"> • 2-D shapes [for example, rectangles (including squares), circles and triangles] 	46–47
	<ul style="list-style-type: none"> • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] 	50–51
Geometry – position and direction	describe position, direction and movement, including whole, half, quarter and three-quarter turns	54–56



Year 2 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 1	Page reference
Number – number and place value	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	6–10
	recognise the place value of each digit in a two-digit number (tens, ones)	8
	identify, represent and estimate numbers using different representations, including the number line	14
	compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs	11–13
	read and write numbers to at least 100 in numerals and in words	4
	use place value and number facts to solve problems	16, 20, 24, 26, 28
Number – addition and subtraction	solve problems with addition and subtraction:	
	<ul style="list-style-type: none"> using concrete objects and pictorial representations, including those involving numbers, quantities and measures 	33–37, 41
	<ul style="list-style-type: none"> applying their increasing knowledge of mental and written methods 	16–24
	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	24
	add and subtract numbers using concrete objects, pictorial representations, and mentally, including:	
	<ul style="list-style-type: none"> a two-digit number and ones 	16
	<ul style="list-style-type: none"> a two-digit number and tens 	16–17
	<ul style="list-style-type: none"> two two-digit numbers 	18–19
	<ul style="list-style-type: none"> adding three one-digit numbers 	17
	show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	35
	recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems	24
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	5, 7, 26
	calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs	25–28



Year 2 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 1	Page reference
Number – multiplication and division <i>(continued)</i>	show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	26, 28
	solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	25–28, 33–37
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	29–30
	write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	31–32
Measurement	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	38–40
	compare and order lengths, mass, volume/capacity and record the results using >, < and =	38–42
	recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	36–37
	find different combinations of coins that equal the same amounts of money	36–37
	solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	34, 36
	compare and sequence intervals of time	43
	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	44–45
	know the number of minutes in an hour and the number of hours in a day	43
Geometry – properties of shapes	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	46–47, 52
	identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	50–51
	identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid]	50
	compare and sort common 2-D and 3-D shapes and everyday objects	52



Year 2 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 1	Page reference
Geometry – position and direction (continued)	order and arrange combinations of mathematical objects in patterns and sequences	52–53
	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)	54–56
Statistics	interpret and construct simple pictograms, tally charts, block diagrams and simple tables	57–59
	ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity	57–59
	ask and answer questions about totalling and comparing categorical data	58–59



Year 3 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – number and place value	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	4
	compare and order numbers up to 1000	8,10
	identify, represent and estimate numbers using different representations	6
	read and write numbers up to 1000 in numerals and in words	5
	solve number problems and practical problems involving these ideas	10–11
Number – addition and subtraction	add and subtract numbers mentally, including:	
	• a three-digit number and tens	33
	• a three-digit number and hundreds	33
	add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	34–35
	estimate the answer to a calculation and use inverse operations to check answers	6, 46
	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	46–49
Number – multiplication and division	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	39–40
	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	41–44
	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	46–49
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	17
	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	20
	recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	19
	recognise and show, using diagrams, equivalent fractions with small denominators	18



Year 3 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – fractions (continued)	add and subtract fractions with the same denominator within one whole	21
	compare and order unit fractions, and fractions with the same denominators	17
	solve problems that involve all of the above	21
Measurement	measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	52–56
	measure the perimeter of simple 2-D shapes	55
	add and subtract amounts of money to give change, using both £ and p in practical contexts	46, 51
	tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	16, 63–64
	estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight	64
	know the number of seconds in a minute and the number of days in each month, year and leap year	63
	compare durations of events	65
Geometry – properties of shapes	draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	67, 70–71
	recognise angles as a property of shape or a description of a turn	77
	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	77
	identify horizontal and vertical lines and pairs of perpendicular and parallel lines	68
Statistics	interpret and present data using bar charts, pictograms and tables	83
	solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables	84



Year 4 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – number and place value	find 1000 more or less than a given number	12
	count backwards through zero to include negative numbers	9
	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	4
	order and compare numbers beyond 1000	8
	identify, represent and estimate numbers using different representations	6–11
	round any number to the nearest 10, 100 or 1000	6–7
	solve number and practical problems that involve all of the above and with increasingly large positive numbers	4–16
	read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value	16
Number – addition and subtraction	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	33–35
	estimate and use inverse operations to check answers to a calculation	49
	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	46, 48–49
Number – multiplication and division	recall multiplication and division facts for multiplication tables up to 12×12	39–40
	use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	4, 14, 41–42
	recognise and use factor pairs and commutativity in mental calculations	36, 41
	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	43
	solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	41, 46–48



Year 4 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – fractions (including decimals)	recognise and show, using diagrams, families of common equivalent fractions	17–18
	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	23–25
	solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number	20
	add and subtract fractions with the same denominator	21
	recognise and write decimal equivalents of any number of tenths or hundredths	23
	recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$	23
	find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	14
	round decimals with one decimal place to the nearest whole number	25
	compare numbers with the same number of decimal places up to two decimal places	24
	solve simple measure and money problems involving fractions and decimals to two decimal places	17–21, 23–25, 46
Measurement	convert between different units of measure [for example, kilometre to metre; hour to minute]	52–53
	measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	55–56
	find the area of rectilinear shapes by counting squares	57–58
	estimate, compare and calculate different measures, including money in pounds and pence	46
	read, write and convert time between analogue and digital 12- and 24-hour clocks	64
	solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	63–65
Geometry – properties of shapes	compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	67–69

**Year 4 programme of study**

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Geometry – properties of shapes <i>(continued)</i>	identify acute and obtuse angles and compare and order angles up to two right angles by size	77
	identify lines of symmetry in 2-D shapes presented in different orientations	72
	complete a simple symmetric figure with respect to a specific line of symmetry	72
Geometry – position and direction	describe positions on a 2-D grid as coordinates in the first quadrant	72–75
	describe movements between positions as translations of a given unit to the left/right and up/down	73
	plot specified points and draw sides to complete a given polygon	74
Statistics	interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	83–85
	solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	83–85



Year 5 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – number and place value	read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	4, 8
	count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	6–7, 14
	interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	9
	round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	6–7
	solve number problems and practical problems that involve all of the above	4–16
	read Roman numerals to 1000 (M) and recognise years written in Roman numerals	16
Number – addition and subtraction	add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	34–35
	add and subtract numbers mentally with increasingly large numbers	33
	use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	49
	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	46–48
Number – multiplication and division	identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	36
	know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	37
	establish whether a number up to 100 is prime and recall prime numbers up to 19	37
	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	43
	multiply and divide numbers mentally drawing upon known facts	41–42
	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	44
	multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	14



Year 5 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – multiplication and division <i>(continued)</i>	recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)	38
	solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	46–49
	solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	46–49
	solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	46–49
Number – fractions (including decimals and percentages)	compare and order fractions whose denominators are all multiples of the same number	17
	identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	18
	recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 52 + 54 = 56 = 151]	19
	add and subtract fractions with the same denominator and denominators that are multiples of the same number	21
	multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	22
	read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$]	23
	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	23
	round decimals with two decimal places to the nearest whole number and to one decimal place	25
	read, write, order and compare numbers with up to three decimal places	24
	solve problems involving number up to three decimal places	23–25, 46–49
	recognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimal	26–27
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	26–30	



Year 5 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Measurement	convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	52–53
	understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	54
	measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	55–56
	calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm ²) and square metres (m ²) and estimate the area of irregular shapes	57–58
	estimate volume and capacity	60–61
	solve problems involving converting between units of time	63–66
	use all four operations to solve problems involving measure using decimal notation, including scaling	63–66
Geometry – properties of shapes	identify 3-D shapes, including cubes and other cuboids, from 2-D representations	67–70
	know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	77–79
	draw given angles, and measure them in degrees (°)	79
	identify:	
	• angles at a point and one whole turn (total 360°)	80
	• angles at a point on a straight line and a turn (total 180°)	80
	• other multiples of 90°	81
	use the properties of rectangles to deduce related facts and find missing lengths and angles	81
distinguish between regular and irregular polygons based on reasoning about equal sides and angles	81	
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	72–76
Statistics	solve comparison, sum and difference problems using information presented in a line graph	85
	complete, read and interpret information in tables, including timetables	66, 83–84



Year 6 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – number and place value	read, write, order and compare numbers up to 10 000 000 and determine the value of each digit	4–5, 8–11
	round any whole number to a required degree of accuracy	6–7
	use negative numbers in context, and calculate intervals across zero	9
	solve number and practical problems that involve all of the above	4–16
Number – addition, subtraction, multiplication and division	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication	43
	divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context	44, 47
	divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context	44, 47
	perform mental calculations, including with mixed operations and large numbers	33, 41–42, 45
	identify common factors, common multiples and prime numbers	36–37
	use their knowledge of the order of operations to carry out calculations involving the four operations	45
	solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	46–48
	solve problems involving addition, subtraction, multiplication and division	46–48
	use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	49
Number – fractions (including decimals and percentages)	use common factors to simplify fractions; use common multiples to express fractions in the same denomination	17–18
	compare and order fractions, including fractions > 1	17–19
	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	21
	multiply simple pairs of proper fractions, writing the answer in its simplest form	22
	divide proper fractions by whole numbers	22



Year 6 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Number – fractions (including decimals and percentages) <i>(continued)</i>	associate a fraction with division and calculate decimal fraction equivalents for a simple fraction	20, 23
	identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places	14, 23
	multiply one-digit numbers with up to two decimal places by whole numbers	30
	use written division methods in cases where the answer has up to two decimal places	30
	solve problems which require answers to be rounded to specified degrees of accuracy	25
	recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	30
Ratio and proportion	solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts	31
	solve problems involving the calculation of percentages and the use of percentages for comparison	31–32
	solve problems involving similar shapes where the scale factor is known or can be found	31–32
	solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	32
Algebra	use simple formulae	46, 50–51
	generate and describe linear number sequences	12–15
	express missing number problems algebraically	50–51
	find pairs of numbers that satisfy an equation with two unknowns	51
	enumerate possibilities of combinations of two variables	48, 50–51
Measurement	solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate	52–53
	use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places	52–54, 63–66
	convert between miles and kilometres	54



Year 6 programme of study

Topic	Curriculum requirements covered in Maths Revision Guide Key Stage 2	Page reference
Measurement (continued)	recognise that shapes with the same areas can have different perimeters and vice versa	55–59
	recognise when it is possible to use formulae for area and volume of shapes	55–59
	calculate the area of parallelograms and triangles	58
	calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units	60
Geometry – properties of shapes	draw 2-D shapes using given dimensions and angles	67–69, 71
	recognise, describe and build simple 3-D shapes, including making nets	70–71
	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	77–81
	illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	82
	recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	80
Geometry – position and direction	describe positions on the full coordinate grid (all four quadrants)	74–76
	draw and translate simple shapes on the coordinate plane, and reflect them in the axes	72–76
Statistics	interpret and construct pie charts and line graphs and use these to solve problems	85–87
	calculate and interpret the mean as an average	89