

	EYFS	Year 1	Year 2	Year 3	Year 4
Counting	<ul style="list-style-type: none"> Children count reliably with numbers from one to 20. 	<ul style="list-style-type: none"> 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; count in multiples of twos, fives and tens 	<ul style="list-style-type: none"> count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward 	<ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. 	<ul style="list-style-type: none"> count in multiples of 6, 7, 9, 25 and 1000 find 1000 more or less than a given number. count backwards through zero to include negative numbers
Place Value			<ul style="list-style-type: none"> recognise the place value of each digit in a two-digit number compare and order numbers from 0 up to 100; use <, > and = signs 	<ul style="list-style-type: none"> recognise the place value of each digit in a three-digit number compare and order numbers up to 1000 	<ul style="list-style-type: none"> recognise the place value of each digit in a four-digit number order and compare numbers beyond 1000 round any number to the nearest 10, 100 or 1000
Number facts (+/-)	<ul style="list-style-type: none"> Say which number is one more or one less than a given number to 20. 	<ul style="list-style-type: none"> given a number, identify one more and one less represent and use number bonds and related subtraction facts within 20 	<ul style="list-style-type: none"> use place value and number facts to solve problem recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 		
Mental +/-	<ul style="list-style-type: none"> Using quantities and objects, they add and subtract two single-digit numbers and 	<ul style="list-style-type: none"> add and subtract one-digit and two-digit numbers to 20, including zero 	<ul style="list-style-type: none"> add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TU+U, TU+T, TU+TU 	<ul style="list-style-type: none"> add and subtract numbers mentally, including: HTU+U, HTU+T and HTU+H 	

	count on or back to find the answer.		and U+U+U •show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.		
Written +/-				•add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	•add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
Problems +/-		•solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.	•solve problems with addition and subtraction, using concrete, pictorial and abstract representation •recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	•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	•estimate and use inverse operations to check answers to a calculation •solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
Number facts (\times/\div)			•recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	•recall multiplication and division facts for multiplication tables up to 12×12

Mental (x/÷)			<ul style="list-style-type: none"> calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot 	<ul style="list-style-type: none"> 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 methods 	<ul style="list-style-type: none"> 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 recognise and use factor pairs and commutativity in mental calculations
Written (x/÷)			<ul style="list-style-type: none"> Progress to formal written methods calculations as above 	<ul style="list-style-type: none"> multiply two-digit and three-digit numbers by a one-digit number using formal written layout 	
Problems (x/÷)		<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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
Recognising fractions	<ul style="list-style-type: none"> They solve problems, including 	<ul style="list-style-type: none"> recognise, find and name a half as one of two equal parts of an object, 	<ul style="list-style-type: none"> recognise, find, name and write fractions $1/3$, $1/4$, 	<ul style="list-style-type: none"> count up and down in tenths; recognise that tenths arise 	<ul style="list-style-type: none"> count up and down in hundredths recognise that hundredths arise when dividing an object by one

	doubling, halving and sharing.	shape or quantity •recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	2/4 and 3/4 of a length, shape, set of objects or quantity	from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	hundred and dividing tenths by ten.
Comparing fractions				•compare and order unit fractions, and fractions with the same denominators •recognise and show, using diagrams, equivalent fractions with small denominators	•recognise and show, using diagrams, families of common equivalent fractions
Finding Fraction of quantities		recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	•recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators •recognise and use fractions as numbers: unit fractions and non unit fractions with small denominators	•solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non- unitfractions where the answer is a whole number
Fraction calculations			•write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	•add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]	•add and subtract fractions with the same denominator
Decimals as fractional amounts					•recognise and write decimal equivalents of any number of tenths or hundredths •recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ •find the effect of dividing a one- or two-digit number by 10 and100, identifying the value of the digits in the answer as ones,tenths and

					hundredths
Ordering decimals					<ul style="list-style-type: none"> round decimals with one decimal place to the nearest whole number compare numbers with the same number of decimal places up to two decimal places
Fraction problems				<ul style="list-style-type: none"> solve problems using all fraction knowledge 	<ul style="list-style-type: none"> solve simple measure and money problems involving fractions and decimals to two decimal places
Measures	<ul style="list-style-type: none"> Children use everyday language to talk about size, weight, capacity and distance to compare quantities and objects and to solve problems. 	<ul style="list-style-type: none"> compare, describe and solve practical problems for: length/height, weight/mass, capacity/volume & time measure and begin to record length/height, weight/mass, capacity/volume & time 	<ul style="list-style-type: none"> choose and use appropriate standard units to estimate and measure length/height (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); 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 	<ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) 	<ul style="list-style-type: none"> Convert between different units of measure estimate, compare and calculate different measures, including money in pounds and pence
Mensuration				<ul style="list-style-type: none"> measure the perimeter of simple 2-D shapes 	<ul style="list-style-type: none"> measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares
Money	<ul style="list-style-type: none"> Children use everyday language to talk 	<ul style="list-style-type: none"> recognise and know the value of different denominations of coins 	<ul style="list-style-type: none"> recognise and use symbols for pounds (£) and pence (p); 	<ul style="list-style-type: none"> add and subtract amounts of money to give change, using both £ and p in 	

	about money to compare quantities and objects and to solve problems.	and notes	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 money of the same unit, including giving change	practical contexts	
Time	•Children use everyday language to talk about time to compare quantities and objects and to solve problems.	•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 and half past the hour and draw the hands on a clock face to show these times	•compare and sequence intervals of time •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 •know the number of minutes in an hour and the number of hours in a day	•tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks •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 •know the number of seconds in a minute and the number of days in each month, year and leap year compare durations of events	•Convert between different units of measure (e.g. Hours to minutes) •read, write and convert time between analogue and digital 12- and 24-hour clocks •solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days
Shape vocabulary	•Explore characteristics of everyday	•recognise and name common 2-D shapes (e.g. Square, circle, triangle)	vertices, edges, faces, symmetry)	•identify horizontal and vertical lines and pairs of perpendicular and parallel	

	objects and shapes and use mathematical language to describe them.	<ul style="list-style-type: none"> •recognise and name common 3-D shapes (e.g. Cubes, cuboids, pyramids & spheres) 		lines	
Properties of 2D shapes			<ul style="list-style-type: none"> •identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. •compare and sort common 2-D and 3-D shapes and everyday objects. 	<ul style="list-style-type: none"> •draw 2-D shapes 	<ul style="list-style-type: none"> •compare and classify geometric shapes, including quadrilaterals and triangles, based on properties and sizes •identify lines of symmetry in 2-D shapes presented in different orientations •complete a simple symmetric figure with respect to a specific line of symmetry.
Properties of 3-d shapes			<ul style="list-style-type: none"> •identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces •identify 2-D shapes on the surface of 3-D shapes. •compare and sort common 2-D and 3-D shapes and everyday objects. 	<ul style="list-style-type: none"> •make 3-D shapes using modelling materials •recognise 3-D shapes in different orientations and describe them 	
Angles				<ul style="list-style-type: none"> •recognise angles as a property of shape or a description of a turn •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 or less than right 	<ul style="list-style-type: none"> •identify acute and obtuse angles and compare and order angles up to two right angles by size

				angle	
Position & Direction	<ul style="list-style-type: none"> Children use everyday language to talk about position to compare quantities and objects and to solve problems. 	<ul style="list-style-type: none"> describe position, direction and movement, including whole, half, quarter and three-quarter turns. 	<ul style="list-style-type: none"> order and arrange combinations of mathematical objects in patterns and sequences. 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 $\frac{3}{4}$ turns 		<ul style="list-style-type: none"> describe positions on a 2-D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon
Interpreting data			<ul style="list-style-type: none"> interpret and construct simple pictograms, tally charts, block diagrams and simple tables 	<ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables 	<ul style="list-style-type: none"> interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
Extract info from data			<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

