Area: Place Value: Counting

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Numbers1,2,3 Number 4 Number 5 Count to 6,7and 8, Count to 9 and 10, Count to 20	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count numbers to 100 in numerals; count in multiples of twos, fives and tens	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Count in multiples of 6, 7, 9, 25 and 1000 Count backwards through zero to include negative numbers.	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Count forwards and backwards with positive and negative whole numbers, including through zero.	

Area: Place Value: Represent

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
	Identify and represent numbers using objects and pictorial representations. Read and write numbers to 100 in numerals. Read and write numbers to 20 in numerals and words.	Read and write numbers to at least 100 in numerals and words. Identify, represent and estimate numbers using different representations, including the number line.	Identify, represent and estimate numbers using different representations. Read and write numbers to at least 1000 in numerals and words.	Identify, represent and estimate numbers using different representations. 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.	Read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Read, write, (order and compare) numbers to at least 10 000 000 and determine the value of each digit.

Area: Place Value: Use PV and compare

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Comparing quantities of identical, then non-identical objects. Comparing groups up to 10	Given a number, identify one more and one less.	Recognise the place value of each digit in a two-digit number (tens, ones) Compare and order numbers from 0 up to 100; use ˃ ˂ and = signs	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) Compare and order numbers up to 1000	Find 1000 more or less than a given number. Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, ones). Order and compare numbers beyond 1000	(Read, write), o0reder and compare numbers to at least 1 000 000 and determine the value of each digit.	(Read, write), o0reder and compare numbers to at least 10 000 000 and determine the value of each digit.

Area: Place Value: Problems and rounding

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
		Use place value and number facts to solve problems.	Solve number problems and practical problems involving these ideas.	Round any number to the nearest 10, 100 or 1000. Solve number and practical problems that involve all of the above and with increasingly large positive numbers.	Interpret negative numbers in context. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 or 100 000. Solve number problems and practical problems that involve all of the above.	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 all of the above.

Area: Addition & Subtraction: Recall, Represent, Use

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Sorting into groups Number bonds to 5 Combining two groups to find the whole Number bonds to 10 – using 10's frame and part-whole model	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts within 20	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing numbers problems.	Estimate the answer to a calculation and use the inverse operations to check answers	Estimate and use inverse operations to check answers to a calculation.	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.	Sorting into groups Number bonds to 5 Combining two groups to find the whole Number bonds to 10 – using 10's frame and part-whole model

Area: Addition & Subtraction: Calculations

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Adding by counting on Taking away by counting back	Add and subtract one-digit and two-digit numbers to 20, including zero.	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	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.	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Add and subtract numbers mentally with increasingly large numbers.	Perform mental calculations, including with mixed operations and large numbers. Use their knowledge of the order of operations to carry out calculations involving the four operations.

Area: Addition & Subtraction: Solve Problems

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
One more, one less	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = __ - 9	Solve problems with addition and subtraction: Using concrete objects and pictorial representations, including those involving numbers, quantities and measures; Applying their increasing knowledge of mental and written methods.	Solve problems including missing numbers problems, using number facts, place value, and more complex addition and subtraction.	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Area: Multiplication and Division: Recall, Represent & Use

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Doubling and halving Odds and Evens		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) and division of one number by another cannot.	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 x 12. 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.	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 (non-prime) numbers. Establish whether a number up to100 is prime and recall prime numbers up to 19. Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	Identify common factors, common multiples and prime numbers. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Area: Multiplication and Division: Calculations

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Finding double the amount Finding half, and sharing		Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.	Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers, using mental and progressing to formal written methods.	Multiply two-digit and three-digit numbers by using formal and written layout.	Multiply numbers up to 4 digits by a one-digit or two-digit number using a formal written method, including long multiplication for two-digit numbers. Multiply and divide numbers mentally drawing on known facts. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders approximately for the context. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. 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. 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. Perform mental calculations, including with mixed operations and large numbers.

Area: Multiplication and Division: Solve Problems

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
	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.	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	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.	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.	Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.	Solve problems involving addition, subtraction, multiplication and division.

Area: Multiplication and Division: Combined operations

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
					Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.	Use their knowledge of the order of operations to carry out calculations involving the four operations.

Area: Fractions: Recognise and Write

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
	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.	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.	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 discreet 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.	Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Recognise mixed numbers and improper fractions and convert form one form to the other and write mathematical statements > 1 as a mixed number For example: $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$	

Area: Fractions: Compare

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
		Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	Recognise and show using diagrams, equivalent fractions with small denominators. Compare and order unit fractions, and fractions with the same denominator.	Recognise and show, using diagrams, families of common equivalent fractions.	Compare and order fractions whose denominators are all multiples of the same number.	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. Compare and order fractions, including fractions > 1.

Area: Fractions: Calculations

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Find half by sharing.		Write simple fractions for example, ½ of 6 = 3	Add and subtract fractions with the same denominator with one whole For example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$	Add and subtract fractions with the same denominator.	Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.	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 For example $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ Divide proper fractions by whole numbers For example $\frac{1}{3} \div 2 = \frac{1}{6}$

Area: Fractions: Solve problems

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
			Solve problems that involve all of the above	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a while number.		

Area: Decimals: Recognise and Write

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
				Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$	Read and write decimal numbers as fractions For example, $0.71 = \frac{71}{100}$ Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.	Identify the value of each digit in numbers given to three decimal places.

Area: Decimals: Compare

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
				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.	Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places.	

Area: Decimals: Calculations and Problems

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
				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.	Solve problems involving number up to three decimal places.	Multiply and divide numbers by 10, 100 and 1000 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 which require answers to be rounded to specified degrees of accuracy.

Area: Fractions, Decimals and Percentages

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
				Solve simple measure and money problems involving fractions and decimals to two decimal places.	Recognise the percent symbol % and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. 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.	Associate a fraction with division and calculate decimal fraction equivalents For example 0.375 for a simple fraction For example $\frac{3}{8}$ Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Area: Ratio and Proportion

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
						Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages For example, of measures, and such as 15% of 360, and the use of percentages for comparisons. Solve problems involving similar shapes where the scale factor is known or can be found. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Area: Algebra

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Number bonds to 10 (part-whole model) Making simple patterns. Exploring more complex patterns.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Solve problems including missing number problems.			Use simple formulae. Generate and describe linear number sequences. Express missing number problems algebraically. Find pairs of numbers that satisfy an equation with two unknowns. Enumerate possibilities of combinations of two variables.

Area: Measurement: Using measures

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Measure length, height and distance. Measure weight Measure capacity	Compare, describe and solve practical problems for; Lengths and heights (eg. long/short, longer/shorter, tall/short, double/half) Mass/weights (eg. heavy/light, heavier than/lighter than) Capacity and volume (eg. full/empty, more than/less than, half full, quarter) Time (eg. quicker, slower, earlier, later) Measure and begin to record the following; Lengths and heights Mass/weight Capacity and volume Time (hours, minutes, seconds)	Choose and use appropriate standard units to 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 =	Measure, compare, add, subtract; lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Convert between different units of measure (eg. kilometre to metre, hour to minute) Estimate, compare and calculate different measures.	Convert between different units of metric measure (eg kilometre and metre; centimetre and metre, centimetre and millimetre; gram and kilogram; litre and millilitre). Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Use all four operations to solve problems involving measure (eg. Length, mass, volume, money) using decimal notation, including scaling.	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. 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 up to three decimal places. Convert between miles and kilometres.

Area: Measurement: Money

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
	Recognise and know the value of different denominations of coins and notes.	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 money of the same unit, including giving change.	Add and subtract amounts of money to give change, using both £ and p in practical contexts.	Estimate, compare and calculate different measures, including money in pounds and pence.	Use all four operations to solve problems involving measure (eg. Money)	

Area: Measurement: Time

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
My Day	Sequence events in chronological order using language (eg. Before and after, next, first, today, yesterday, tomorrow, morning, afternoon, evening). 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 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 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, 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 (eg. to calculate the time taken by particular events or tasks).	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.	Solve problems involving converting between units of time.	Use, read, write and convert between standard units, converting measurements of time from a similar unit of measure to a larger unit, and vice versa.

Area: Measurement: Perimeter, Area, Volume

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
			Measure the perimeter of simple 2D shapes.	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Find the area of rectilinear shapes by counting squares.	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes. Estimate volume (eg. using 1cm³ blocks to build cuboids (including cubes)) and capacity (eg using water).	Recognise that shapes with the same areas can have different perimeters and vice versa. Recognise when it is possible to use formulae for area and volume of shapes. Calculate the area of parallelograms and triangles. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units (eg mm³ and km³)

Area: Geometry: 2D shapes

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
2D shape	Recognise and name common 2D shapes (eg rectangles (including squares), circles and triangles)	Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. Identify 2D shapes on the surface of 3D shapes (eg a circle on a cylinder and a triangle on a pyramid). Compare and sort common 2D shapes and everyday objects.	Draw 2 D shapes	Compare and classify geometric shapes including quadrilaterals and triangles, based on their properties and sizes. Identify lines of symmetry in 2D shapes presented in different orientations.	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Use the properties of rectangles to deduce related facts and find missing lengths and angles.	Draw 2D shapes using given dimensions and angles. Compare and classify geometric shapes based on their properties and sizes. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.

Area: Geometry: 3D shapes

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
3D shape	Recognise and name common 3D shapes (eg cuboids (including cubes), pyramids and spheres).	Recognise and name common 3D shapes (eg cuboids (including cubes), pyramids and spheres). Compare and sort common 3D shapes and everyday objects.	Make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.		Identify 3D shapes, including cubes and other cuboids, from 2D representations.	Recognise, describe and build simple 3D shapes, including making nets.

Area: Geometry: Angles & Lines

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
			Recognise angles as a property of shape or a description of a turn. Identify right angles, recognise that two right angles makes a half turn, three make three quarters of a turn, and four make a complete turn; identify whether angles are greater than or less than a right angle. Identify horizontal and vertical lines and pairs of perpendicular or parallel lines.	Identify acute and obtuse angles and compare and order angles up to two right angles by size. Identify lines of symmetry in 2D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.	Know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees. Identify: Angles at a point and one whole turn (total 360˚) Angles at a point on a straight line and ½ a turn (total 360˚) Other multiples of 90˚	Find unknown angles in any triangles, quadrilaterals, and regular polygons. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Area: Geometry: Position & Direction

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Spatial awareness	Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	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 three-quarter turns (clockwise and anti-clockwise).		Describe positions on a 2D 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 specific points and draw sides to complete a given polygon.	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.	Describe positions on the full coordinate grid (all four quadrants). Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Area: Statistics: Present and Interpret

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
		Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.	Interpret and present data using bar charts, pictograms and tables.	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.	Compete, read and interpret information in tables, including timetables.	Interpret and construct pie charts and line graphs and used these to solve problems.

Area: Statistics: Solve Problems

EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
		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.	Solve one-step and two-step questions (eg. 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables.	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Solve comparison, sum and difference problems using information presented in a line graph.	Calculate and interpret the mean as an average.