



Place Value	Counting						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Count objects, actions and sounds</p> <p>Count beyond 10.</p> <p>Link the number symbol (numeral) with its cardinal number value</p> <p>To represent numbers using fingers, marks on paper or pictures.</p> <p>Sometimes matches numeral and quantity correctly.</p> <p>Explore the composition of numbers to 10</p> <p><u>NUMBER ELG</u> Have a deep understanding of numbers to 10, including the composition of each number</p>	<p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.</p> <p>given a number, identify one more and one less</p>	<p>Count in steps of 2,3,5, and 10.</p>	<p>count from 0 in multiples of 4, 8, 50 and 100;</p> <p>find 10 or 100 more or less than a given number</p>	<p>count backwards through zero to include negative numbers</p> <p>count in multiples of 6, 7, 9, 25 and 1 000</p> <p>find 1 000 more or less than a given number</p>	<p>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</p>	<p>use negative numbers in context, and calculate intervals across zero</p>

<p><u>NUMERICAL PATTERN ELG</u> Verbally count beyond 20, recognising the pattern of the counting system</p> <p><u>NUMERICAL PATTERN ELG</u> Explore and represent patterns within numbers up to 10 including evens and odds, double facts and how quantities can be distributed equally</p>							
--	--	--	--	--	--	--	--

Comparing Numbers

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Understand the one more than/one less than relationship between consecutive numbers</p> <p>Compare numbers: more than/less than/fewer/the same as/equal to</p> <p><u>NUMERICAL PATTERNS ELG</u></p>	<p>use the language of: equal to, more than, less than (fewer), most, least</p>	<p>compare and order numbers from 0 up to 100; use <, > and = signs</p>	<p>compare and order numbers up to 1 000</p>	<p>order and compare numbers beyond 1 000</p> <p><i>compare numbers with the same number of decimal places up to two decimal places (copied from Fractions)</i></p>	<p>read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)</p>	<p>read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears also in Reading and Writing Numbers)</p>	

<p>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity</p>						
--	--	--	--	--	--	--

Identifying, representing and estimating numbers

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Shows an interest in representing numbers.</p> <p>Selects the correct numeral to represent 1 to 5.</p> <p>Subitise.</p> <p>Link the number symbol (numeral) with its cardinal number value</p> <p>NUMBER ELG Subitise up to 5</p>	<p>identify and represent numbers using objects and pictorial representations including the number line</p>	<p>identify, represent and estimate numbers using different representations, including the number line</p>	<p>identify, represent and estimate numbers using different representations</p>	<p>identify, represent and estimate numbers using different representations</p>		

Addition and Subtraction	Number Bonds					
--------------------------	---------------------	--	--	--	--	--

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
NUMBER ELG	represent and use number bonds and	recall and use addition and subtraction facts				

	Automatically recall number bonds for numbers 0-5 and some to 10 including subtraction facts and doubling facts	related subtraction facts within 20	to 20 fluently, and derive and use related facts up to 100				
--	--	-------------------------------------	--	--	--	--	--

Mental Calculations

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	NUMBER ELG Subitise up to 5	add and subtract one-digit and two-digit numbers to 20, including zero read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods)	add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> • a two-digit number and ones • a two-digit number and tens • two two-digit numbers adding three one-digit numbers show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	add and subtract numbers mentally, including: <ul style="list-style-type: none"> • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds 		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

Written Methods

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Mental Calculation)		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)	

Inverse Operations, Estimating and Checking Answers.

	Inverse Operations, Estimating and Checking Answers.						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		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	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	use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.	recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
	Problem Solving						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Shows an interest in number problems. <u>NUMERICAL PATTERN ELG</u> Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.	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 <i>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (copied from Measurement)</i>	solve problems, including missing number 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 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

Multiplication and Division Facts

Multiplication and Division	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		count in multiples of twos, fives and tens (copied from Number and Place Value)	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward (copied from Number and Place Value) recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	count from 0 in multiples of 4, 8, 50 and 100 (copied from Number and Place Value) recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	count in multiples of 6, 7, 9, 25 and 1 000 (copied from Number and Place Value) recall multiplication and division facts for multiplication tables up to 12×12	count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 (copied from Number and Place Value)	count in multiples of twos, fives and tens (copied from Number and Place Value)

Mental Calculation

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Automatically recall number bonds for numbers 0-5 and some to 10		show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	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 (appears also in Written Methods)	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 (appears also in Properties of Numbers)	multiply and divide numbers mentally drawing upon known facts multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	perform mental calculations, including with mixed operations and large numbers associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$) (copied from Fractions)

Written Calculation

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			calculate mathematical statements for multiplication and division within the	write and calculate mathematical statements for multiplication and division using the multiplication	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	multiply numbers up to 4 digits by a one- or two-digit number using a formal written method,	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the

			<p>multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs</p>	<p>tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Mental Methods)</p>		<p>including long multiplication for two-digit numbers</p> <p>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</p>	<p>formal written method of long multiplication</p> <p>divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division where appropriate for the context 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</p> <p><i>use written division methods in cases where the answer has up to two decimal places (copied from Fractions (including decimals))</i></p>
--	--	--	---	--	--	--	--

Properties of Numbers: Multiples, Factors, Primes, Square and Cube Numbers

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					<p>recognise and use factor pairs and commutativity in mental calculations (repeated)</p>	<p>identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</p> <p>establish whether a number up to 100 is prime</p>	<p>identify common factors, common multiples and prime numbers</p> <p><i>use common factors to simplify fractions; use common multiples to express fractions in the same denomination (copied from Fractions)</i></p>

						and recall prime numbers up to 19	<i>calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm³) and cubic metres (m³), and extending to other units such as mm³ and km³</i>
						recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)	

Problem Solving

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	They solve problems, including doubling, halving and sharing.	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	<p>solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes</p> <p>solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p>	<p>solve problems involving addition, subtraction, multiplication and division</p> <p><i>solve problems involving similar shapes where the scale factor is known or can be found</i> (copied from Ratio and Proportion)</p>

Order of Operations

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
							use their knowledge of the order of operations to carry out calculations involving the four operations

Inverse Operations, Estimating and Checking Answers

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
--	------	--------	--------	--------	--------	--------	--------

				<i>estimate the answer to a calculation and use inverse operations to check answers (copied from Addition and Subtraction)</i>	<i>estimate and use inverse operations to check answers to a calculation (copied from Addition and Subtraction)</i>		use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy
Fractions	Counting in Fractional Steps						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			<i>Pupils should count in fractions up to 10, starting from any number and using the 1/2 and 2/4 equivalence on the number line (Non Statutory Guidance)</i>	count up and down in tenths	count up and down in hundredths		
	Recognising Fractions						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		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	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise that tenths arise from dividing an object into 10 equal parts and in dividing one - digit numbers or quantities by 10. recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (appears also in Equivalence)	
	Comparing Fractions						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					compare numbers with the same number of decimal places up to two decimal places	read, write, order and compare numbers with up to three decimal places	identify the value of each digit in numbers

							given to three decimal places
Rounding including Decimals							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					round decimals with one decimal place to the nearest whole number	round decimals with two decimal places to the nearest whole number and to one decimal place	solve problems which require answers to be rounded to specified degrees of accuracy
Equivalence (Including Fractions, Decimals and Percentages)							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	recognise and show, using diagrams, equivalent fractions with small denominators	recognise and show, using diagrams, families of common equivalent fractions recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$	identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$) recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents 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 as a decimal fraction	use common factors to simplify fractions; use common multiples to express fractions in the same denomination associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$) recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
Addition and Subtraction of Fractions							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$)	add and subtract fractions with the same denominator	add and subtract fractions with the same denominator and multiples of the same number recognise mixed numbers and improper fractions and convert from one	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

						form to the other and write mathematical statements > 1 as a mixed number (e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$)	
--	--	--	--	--	--	---	--

Multiplication and Division of Fractions

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$) multiply one-digit numbers with up to two decimal places by whole numbers divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$)

Multiplication and Division of Decimals

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					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		multiply one-digit numbers with up to two decimal places by whole numbers multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places

							<p>associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)</p> <p>use written division methods in cases where the answer has up to two decimal places</p>
--	--	--	--	--	--	--	--

Problem Solving

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				<p>solve problems that involve all of the above</p>	<p>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</p> <p>solve simple measure and money problems involving fractions and decimals to two decimal places.</p>	<p>solve problems involving numbers up to three decimal places</p> <p>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 with a denominator of a multiple of 10 or 25.</p>	

Statements should only appear in Year 6 but should be connected to previous learning, particularly fractions and multiplication and division

							Year 6
							<p>solve problems involving the relative sizes of two quantities where missing values can be found by using integer</p>

							<p>multiplication and division facts</p> <p>solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison</p> <p>solve problems involving similar shapes where the scale factor is known or can be found</p> <p>solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>
Measurement	Comparing and Estimating						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		<p>compare, describe and solve practical problems for:</p> <ul style="list-style-type: none"> lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] mass/weight [e.g. heavy/light, heavier than, lighter than] capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] 	<p>compare and order lengths, mass, volume/capacity and record the results using >, < and =</p> <p>compare and sequence intervals of time</p>	<p>compare durations of events, for example to calculate the time taken by particular events or tasks</p> <p>estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds minutes hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (appears also in Telling the Time)</p>	<p>estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring)</p>	<p>calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes (also included in measuring)</p> <p>estimate volume (e.g. using 1 cm³ blocks to build cubes and cuboids) and capacity (e.g. using water)</p>	<p>calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm³) and cubic metres (m³), and extending to other units such as mm³ and km³.</p>

		<p>time [e.g. quicker, slower, earlier, later]</p> <p>sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</p>					
--	--	--	--	--	--	--	--

Measuring and Calculating

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Compare length, weight and capacity.</p> <p>Beginning to use everyday language related to money.</p>	<p>measure and begin to record the following:</p> <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time (hours, minutes, seconds) <p>recognise and know the value of different denominations of coins and notes</p>	<p>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</p> <p>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <p>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	<p>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>measure the perimeter of simple 2-D shapes</p> <p>add and subtract amounts of money to give change, using both £ and p in practical contexts</p>	<p>estimate, compare and calculate different measures, including money in pounds and pence (appears also in Comparing)</p> <p>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>find the area of rectilinear shapes by counting squares</p>	<p>use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.</p> <p>measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p> <p><i>recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)</i> (copied from Multiplication and Division)</p>	<p>solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate (appears also in Converting)</p> <p>recognise that shapes with the same areas can have different perimeters and vice versa</p> <p>calculate the area of parallelograms and triangles</p> <p>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 [e.g. mm³ and km³].</p>

							recognise when it is possible to use formulae for area and volume of shapes
--	--	--	--	--	--	--	---

Telling the Time

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Uses everyday language related to time.</p> <p>Orders and sequences familiar events.</p>	<p>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p> <p>recognise and use language relating to dates, including days of the week, weeks, months and years</p>	<p>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.</p> <p>know the number of minutes in an hour and the number of hours in a day. (appears also in Converting)</p>	<p>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p> <p>estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight (appears also in Comparing and Estimating)</p>	<p>read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Converting)</p>	<p>solve problems involving converting between units of time</p>	

Converting

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			<p>know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time)</p>	<p>know the number of seconds in a minute and the number of days in each month, year and leap year</p>	<p>convert between different units of measure (e.g. kilometre to metre; hour to minute)</p> <p>read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting)</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (appears also in Telling the Time)</p>	<p>convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>solve problems involving converting between units of time</p> <p>understand and use equivalences between metric units and common</p>	<p>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</p> <p>solve problems involving the calculation and conversion of units of measure, using decimal</p>

						imperial units such as inches, pounds and pints	notation up to three decimal places where appropriate (appears also in Measuring and Calculating) convert between miles and kilometres
Geometry- Properties of shape	Comparing and Classifying						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>They explore characteristics of everyday objects and shapes and use mathematical language to describe them.</p> <p>Shows an interest in shape and space by playing with shapes or making arrangements with objects. Shows awareness of similarities of shapes in the environment</p> <p>•Shows interest in shape by sustained construction activity or by talking about shapes or arrangements.</p>	Recognise and name common 2-D and 3-D shapes	compare and sort common 2-D and 3-D shapes and everyday objects		compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	<p>use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p>	compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

<p>Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.</p> <p>Selects a particular named shape.</p> <p>Compose and decompose shapes so that children recognise a shape can have other shapes within it</p> <p>Continue, copy and create repeating patterns</p>						
---	--	--	--	--	--	--

Angles

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			<p>recognise angles as a property of shape or a description of a turn</p> <p>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</p>	<p>identify acute and obtuse angles and compare and order angles up to two right angles by size</p> <p>identify:</p> <ul style="list-style-type: none"> • angles at a point and one whole turn (total 360°) • angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) 	<p>know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p>	<p>recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</p>

				identify horizontal and vertical lines and pairs of perpendicular and parallel lines	<ul style="list-style-type: none"> other multiples of 90° 		
Position, Direction and Movement							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Uses positional language.</p> <p>Can describe their relative position such as 'behind' or 'next to'.</p> <p>Draw information from a simple map. (UW)</p>	describe position, direction and movement, including half, quarter and three-quarter turns.	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)		<p>describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>describe movements between positions as translations of a given unit to the left/right and up/down</p> <p>plot specified points and draw sides to complete a given polygon</p>	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	<p>describe positions on the full coordinate grid (all four quadrants)</p> <p>draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>
Pattern							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Continue, copy and create repeating patterns		order and arrange combinations of mathematical objects in patterns and sequences				
Statistics	Interpreting, Constructing and Presenting Data						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			<p>interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p>	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	complete, read and interpret information in tables, including timetables	interpret and construct pie charts and line graphs and use these to solve problems

			ask and answer questions about totalling and comparing categorical data				
	Solving Problems						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				solve one-step and two-step questions [e.g. '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
Algebra	Equations						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		<i>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = * - 9$</i> (copied from Addition and Subtraction) <i>represent and use number bonds and related subtraction facts within 20</i> (copied from Addition and Subtraction)	<i>recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.</i> (copied from Addition and Subtraction) <i>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</i> (copied from Addition and Subtraction)	<i>solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</i> (copied from Addition and Subtraction) <i>solve problems, including missing number problems, involving multiplication and division, including integer scaling</i> (copied from Multiplication and Division)		<i>use the properties of rectangles to deduce related facts and find missing lengths and angles</i> (copied from Geometry: Properties of Shapes)	<i>express missing number problems algebraically</i> <i>find pairs of numbers that satisfy number sentences involving two unknowns</i> <i>enumerate all possibilities of combinations of two variables</i>
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary- Addition	Learn new vocabulary. Use new vocabulary throughout the day. (C&L)	add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line	add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line, sum, tens, units, partition, addition, column, tens boundary.	add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line, sum, tens, units, partition, addition, column, tens boundary, hundreds boundary, hundreds	add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line, sum, tens, units, partition, addition, column, tens boundary, hundreds boundary, increase, vertical, 'exchange', expanded,	add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line, sum, tens, units, partition, addition, column, tens boundary, hundreds boundary,	add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line, sum, tens, units, partition, addition, column, tens boundary, hundreds boundary,

	Subitise, number, altogether, one more, add, more, plus, equals			'exchange', expanded, compact.	compact, thousands, hundreds, digits, inverse.	increase, vertical, 'carry', expanded, compact, thousands, hundreds, digits, inverse, decimal place, decimal point, tenths, hundredths, thousandths.	increase, vertical, 'carry', expanded, compact, thousands, hundreds, digits, inverse, decimal place, decimal point, tenths, hundredths, thousandths.
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary- Subtraction	Learn new vocabulary. Use new vocabulary throughout the day. (C&L) Number, subtract, take away, minus, equals	equal to, take away, less, minus, subtract, leaves, difference between, how many more, how many fewer/less than, most, least, count back, how many left, how much less is _?	equal to, take away, less, minus, subtract, leaves, difference between, how many more, how many fewer/less than, most, least, count back, how many left, how much less is _? Difference, count on, strategy, partition, tens, units.	equal to, take away, less, minus, subtract, leaves, difference between, how many more, how many fewer/less than, most, least, count back, how many left, how much less is _?, difference, count on, strategy, partition, tens, units, exchange, decrease, hundreds, value, digit, inverse.	equal to, take away, less, minus, subtract, leaves, difference between, how many more, how many fewer/less than, most, least, count back, how many left, how much less is _?, difference, count on, strategy, partition, tens, units, exchange, decrease, hundreds, value, digit, inverse, tenths, hundredths, decimal point, decimal.	equal to, take away, less, minus, subtract, leaves, difference between, how many more, how many fewer/less than, most, least, count back, how many left, how much less is _?, difference, count on, strategy, partition, tens, units, exchange, decrease, hundreds, value, digit, inverse, tenths, hundredths, decimal point, decimal.	equal to, take away, less, minus, subtract, leaves, difference between, how many more, how many fewer/less than, most, least, count back, how many left, how much less is _?, difference, count on, strategy, partition, tens, units, exchange, decrease, hundreds, value, digit, inverse, tenths, hundredths, decimal point, decimal.
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary- Multiplication		groups of, lots of, times, array, altogether, multiply, count.	groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, twice, three times	groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, twice, three times ..., partition, grid method, multiple, product, tens, units, value.	groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, twice, three times ... partition, grid method, multiple, product, sets of, inverse.	groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, twice, three times ... partition, grid method, multiple, product, sets of, inverse, square, factor, integer, decimal, short/long multiplication, 'exchange'	groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, twice, three times ... partition, grid method, multiple, product, sets of, inverse, square, factor, integer, decimal, short/long multiplication, 'exchange', tenths, hundredths, decimal.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary- Division		share, share equally, one each, two each ... group, groups of, lots of, array.	share, share equally, one each, two each ... group, groups of, lots of, array, divide, divide by, divided into, division, grouping, number line, left, left over.	share, share equally, one each, two each ... group, groups of, lots of, array, divide, divide by, divided into, division, grouping, number line, left, left over, inverse, short division, 'exchange', remainder, multiple .	share, share equally, one each, two each ... group, groups of, lots of, array, divide, divide by, divided into, division, grouping, number line, left, left over, inverse, short division, 'carry', remainder, multiple, divisible by, factor.	share, share equally, one each, two each ... group, groups of, lots of, array, divide, divide by, divided into, division, grouping, number line, left, left over, inverse, short division, 'exchange', remainder, multiple, divisible by, factor, inverse, quotient, prime number, prime factors, composite number (non-prime)	groups of, lots of, times, array, altogether, multiply, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, times as big as, once, twice, three times ... partition, grid method, multiple, product, sets of, inverse, square, factor, integer, decimal, short/long multiplication, 'exchange', tenths, hundredths, decimal, common factor.
Enrichment Activities	Outside Learning Areas	Outside Learning Areas Times Table Rock stars TT Rock star Day	Maths Academy Times Table Rock stars TT Rock star Day Maths Ambassador	Maths Academy Times Table Rock stars TT Rock star Day Maths Ambassador	Maths Academy Times Table Rock stars TT Rock star Day Maths Ambassador	Maths Academy Times Table Rock stars TT Rock star Day Maths Ambassador	Maths Academy Times Table Rock stars TT Rock star Day Maths Ambassador