

Maths Curriculum Map

Early Years Foundation Stage			
Early Learning Goal	Mathematical Vocabulary	Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.	
	Number and Place Value	Counting	Verbally count beyond 20, recognising the pattern of the counting system.
		Identifying, Representing and Estimating Numbers	Subitise (recognising quantities without counting) up to 5
		Compare and Order Numbers	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
		Understanding Place Value	Solve real world mathematical problems with numbers up to 5.
	Addition and Subtraction	Mental Calculations	Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
		Solve Problems	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number & Place Value - counting	<p>I can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</p> <p>I can count, read and write numbers to 100 in numerals; count in</p>	I can count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward	<p>I can count from 0 in multiples of 4, 8, 50 and 100;</p> <p>I can find 10 or 100 more or less than a given number</p>	<p>I can count backwards through zero to include negative numbers</p> <p>I can count in multiples of 6, 7, 9, 25 and 1 000</p>	<p>I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>I can count forwards or backwards in steps of</p>	I can use negative numbers in context, and calculate intervals across zero

	<p>multiples of twos, fives and tens</p> <p>I can identify one more and one less than given a number</p>			<p>I can find 1 000 more or less than a given number</p>	<p>powers of 10 for any given number up to 1 000 000</p>	
<p>Number & Place Value – comparing numbers</p>	<p>I can use the language of: equal to, more than, less than (fewer), most, least</p>	<p>I can compare and order numbers from 0 up to 100; use <, > and = signs</p>	<p>I can compare and order numbers up to 1000</p>	<p>I can order and compare numbers beyond 1000</p> <p><i>compare numbers with the same number of decimal places up to 2dp</i></p>	<p>I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</p>	<p>I can read, write, order and compare numbers up to 10 000 000 and determine the value of each digit</p>
<p>Number & Place Value – identifying, representing and estimating</p>	<p>I can identify and represent numbers using object, pictorial and numeral representations including the number line</p>	<p>I can identify and represent numbers using object, pictorial and numeral representations including the number line</p>	<p>I can identify and represent numbers using object, pictorial and numeral representations</p>	<p>I can identify and represent numbers using object, pictorial and numeral representations</p>	<p>I can identify and represent numbers using object, pictorial and numeral representations</p>	<p>I can identify and represent numbers using object, pictorial and numeral representations</p>
<p>Number & Place Value – reading and writing numbers (including Roman Numerals)</p>	<p>I can read and write numbers from 1 to 20 in numerals and words.</p>	<p>I can read and write numbers to at least 100 in numerals and in words</p>	<p>I can read and write numbers up to 1000 in numerals and in words</p> <p><i>I can tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</i></p>	<p><i>I can 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.</i></p>	<p>I can read & write numbers to at least 1 000 000 and determine the value of each digit</p> <p><i>I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</i></p>	<p>I can read & write numbers up to 10 000 000 and determine the value of each digit</p>
<p>Number & Place Value – understanding place value</p>		<p>I can recognise the place value of each digit in a two-digit number (tens, ones)</p>	<p>I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p>	<p>I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p><i>I can find the effect of dividing a one- or two-digit number by 10 and</i></p>	<p>I can 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><i>I can recognise and use thousandths and relate</i></p>	<p>I can read, write, order and compare numbers up to 10 000 000 and determine the value of each digit</p> <p><i>I can identify the value of each digit to three decimal places and</i></p>

				100, identifying the value of the digits in the answer as units, tenths and hundredths	them to tenths, hundredths and decimal equivalents	multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
Number & Place Value – rounding				I can round any number to the nearest 10, 100 or 1000	I can round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000	I can round any whole number to a required degree of accuracy
Number & Place Value – problem solving		use place value and number facts to solve problems	solve number problems and practical problems involving these ideas.	solve number and practical problems that involve all of the above and with increasingly large positive numbers	solve number problems and practical problems that involve all of the above	solve number and practical problems that involve all of the above
Addition & Subtraction – mental calculation	<p>I can represent and use number bonds and related subtraction facts within 20</p> <p>I can add and subtract one-digit and two-digit numbers to 20, including zero</p> <p>I can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p>	<p>I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>I can add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> * a two-digit number and ones * a two-digit number and tens * two two-digit numbers 	<p>I can add and subtract numbers mentally, including:</p> <ul style="list-style-type: none"> * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds 		I can add and subtract numbers mentally with increasingly large numbers	<p>I can perform mental calculations, including with mixed operations and large numbers</p> <p>I can use their knowledge of the order of operations to carry out calculations involving the four operations</p>

		<p>* adding three one-digit numbers</p> <p>I can show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p>				
Addition & Subtraction – written calculation	I can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs		I can add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	I can add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
Addition & Subtraction – inverse operations, estimating & checking	I can recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	I can estimate the answer to a calculation and use inverse operations to check answers	I can estimate and use inverse operations to check answers to a calculation	I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	I can use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.	
Addition & Subtraction – problem solving	I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$	<p>I can solve problems with addition and subtraction:</p> <p>* using concrete objects and pictorial representations, including those involving numbers, quantities and measures</p> <p>* applying their increasing knowledge of</p>	I can solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	I can solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	<p>I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p><i>(also solve problems using all 4 operations).</i></p>

		<p>mental and written methods</p> <p><i>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</i></p>				
Multiplication & Division Facts		I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	I can recall multiplication and division facts for multiplication tables up to 12×12		
Multiplication & Division – mental calculation		I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	<p>I can 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)</p> <p>I can multiply and divide whole numbers by 10 (understanding the place value & not referring to adding a zero)</p>	<p>I can 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</p> <p>I can recognise and use factor pairs and commutativity in mental calculations</p> <p>I can multiply and divide whole numbers and those involving decimals by 10 & 100 (understanding the place value & not referring to adding a zero)</p>	<p>I can multiply and divide numbers mentally drawing upon known facts</p> <p>I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 (understanding the place value & not referring to adding a zero)</p>	<p>I can perform mental calculations, including with mixed operations and large numbers</p> <p><i>associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$)</i></p>

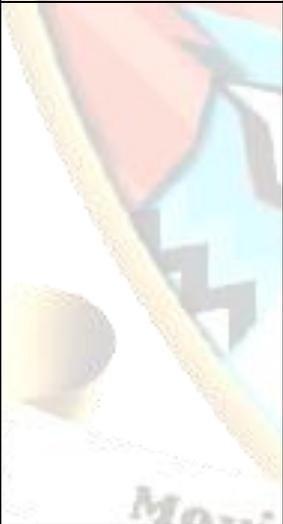
<p>Multiplication & Division - written calculation</p>		<p>I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs</p>	<p>I can write and calculate mathematical statements 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</p>	<p>I can multiply two-digit and three-digit numbers by a one-digit number using formal written layout</p> <p>I can divide numbers up to 3 digits by a one-digit number using the formal written method of short division</p>	<p>I can 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</p> <p>I can 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>I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication</p> <p>I can 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</i></p>
<p>Multiplication & Division - multiples, factors, primes, square and cube numbers</p>				<p>I can recognise and use factor pairs and commutativity in mental calculations</p>	<p>I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</p> <p>I can know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</p>	<p>I can 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</i></p>

					<p>I can establish whether a number up to 100 is prime and recall prime numbers up to 19</p> <p>I can recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)</p>	<p><i>calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units such as mm^3 and km^3</i></p>
Multiplication & Division – order of operations						I can use my knowledge of the order of operations to carry out calculations involving the four operations
Multiplication & Division - inverse operations, estimating and checking answers			<i>estimate the answer to a calculation and use inverse operations to check answers</i>	<i>estimate and use inverse operations to check answers to a calculation</i>		I can use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy
Multiplication & Division – problem solving	I can 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	I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	I can 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	I can 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>I can solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes</p> <p>I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p>	<p>I can 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></p>

					I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	
Fractions, Decimals & Percentages – counting in fractional steps		<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>	I can count up and down in tenths	I can count up and down in hundredths		
Fractions, Decimals & Percentages – recognising fractions	<p>I can recognise, find and name a half as one of two equal parts of an object, shape or quantity</p> <p>I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</p>	<p>I can 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</p>	<p>I can recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p>I can recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10.</p> <p>I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p>	<p>I can recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</p>	<p>I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents (appears also in Equivalence)</p>	

Fractions, Decimals & Percentages – comparing fractions			I can compare and order unit fractions, and fractions with the same denominators		I can compare and order fractions whose denominators are all multiples of the same number	I can compare and order fractions, including fractions >1
Fractions, Decimals & Percentages – comparing decimals				I can compare numbers with the same number of decimal places up to two decimal places	I can read, write, order and compare numbers with up to three decimal places	I can identify the value of each digit in numbers given to three decimal places
Fractions, Decimals & Percentages – rounding decimals				I can round decimals with one decimal place to the nearest whole number	I can round decimals with two decimal places to the nearest whole number and to one decimal place	I can solve problems which require answers to be rounded to specified degrees of accuracy
Fractions, Decimals & Percentages – equivalence including FDP		I can write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	I can recognise and show, using diagrams, equivalent fractions with small denominators	I can recognise and show, using diagrams, families of common equivalent fractions I can recognise and write decimal equivalents of any number of tenths or hundredths I can recognise and write decimal equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$	I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths I can read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$) I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents I can recognise the per cent symbol (%) and understand that per cent	I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination I can associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $\frac{3}{8}$) I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

					relates to “number of parts per hundred”, and write percentages as a fraction with denominator 100 as a decimal fraction	
Fractions, Decimals & Percentages – addition & subtraction			I can add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$)	I can add and subtract fractions with the same denominator	I can add and subtract fractions with the same denominator and multiples of the same number I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$)	I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
Fractions, Decimals & Percentages – multiplication & division of fractions					I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	I can multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$) I can multiply one-digit numbers with up to two decimal places by whole numbers I can divide proper fractions by whole numbers (e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$)

<p>Fractions, Decimals & Percentages - multiplication & division of decimals</p>				<p>I can 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</p>	<p>I can multiply numbers with up to two decimal places by whole numbers (<i>money problems</i>)</p> <p>I can multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places</p> <p>I can 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>	<p>I can multiply numbers with up to two decimal places by whole numbers (<i>money problems</i>)</p> <p>I can associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3/8)</p> <p>I can use written division methods in cases where the answer has up to two decimal places</p>
<p>Fractions, Decimals & Percentages – problem solving</p>			<p>I can solve problems that involve all of the above</p>	<p>I can 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>I can solve simple measure and money problems involving fractions and decimals to two decimal places.</p>	<p>I can solve problems involving numbers up to three decimal places</p> <p>I can 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>	

Moving forward together

<p>Ratio & Proportion <i>Statements only appear in Year 6 but should be connected to previous learning, particularly fractions and multiplication and division</i></p>						<p>I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p> <p>I can 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>I can solve problems involving similar shapes where the scale factor is known or can be found</p> <p>I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>
<p>Measurement – comparing & estimating</p>	<p>I can 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, 	<p>I can compare and order lengths, mass, volume/capacity and record the results using >, < and =</p> <p>I can compare and sequence intervals of time</p>	<p>I can compare durations of events, for example to calculate the time taken by particular events or tasks</p> <p>I can 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</p>	<p>I can estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring)</p>	<p>I can calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes</p> <p>I can estimate volume (e.g. using 1 cm^3 blocks to build cubes and cuboids) and capacity (e.g. using water)</p>	<p>I can calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units such as mm^3 and km^3.</p>

	<p>half, half full, quarter] * time [e.g. quicker, slower, earlier, later]</p> <p>I can sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</p>		<p>a.m./p.m., morning, afternoon, noon and midnight (appears also in Telling the Time)</p>			
<p>Measurement – measuring & calculating</p>	<p>I can measure and begin to record the following: * lengths and heights * mass/weight * capacity and volume * time (hours, minutes, seconds)</p> <p>I can recognise and know the value of different denominations of coins and notes</p>	<p>I can 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>I can recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <p>I can find different combinations of coins that equal the same amounts of money</p> <p>I can solve simple problems in a practical context involving addition and</p>	<p>I can measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p>I can measure the perimeter of simple 2-D shapes</p> <p>I can add and subtract amounts of money to give change, using both £ and p in practical contexts</p>	<p>I can estimate, compare and calculate different measures, including money in pounds and pence</p> <p>I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>I can find the area of rectilinear shapes by counting squares</p>	<p>I can use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.</p> <p>I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>I can 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</i></p>	<p>I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</p> <p>I can recognise that shapes with the same areas can have different perimeters and vice versa</p> <p>I can 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 [e.g. mm³ and km³]. recognise when it is possible to use formulae</p>

		subtraction of money of the same unit, including giving change			for squared (2) and cubed (3)	for area and volume of shapes
Measurement – telling the time	<p>I can 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>I can recognise and use language relating to dates, including days of the week, weeks, months and years</p>	<p>I can 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>I know the number of minutes in an hour and the number of hours in a day.</p>	<p>I can 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>I can 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</p>	<p>I can read, write and convert time between analogue and digital 12 and 24-hour clocks</p> <p>I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p>	I can solve problems involving converting between units of time	
Measurement - converting		I know the number of minutes in an hour and the number of hours in a day.	I know the number of seconds in a minute and the number of days in each month, year and leap year	<p>I can convert between different units of measure (e.g. kilometre to metre; hour to minute)</p> <p>I can read, write and convert time between analogue and digital 12 and 24-hour clocks</p> <p>I can solve problems involving converting from hours to minutes; minutes to seconds;</p>	<p>I can 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>I can solve problems involving converting between units of time</p> <p>I can understand and use equivalences between metric units and common</p>	<p>I can 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>I can solve problems involving the calculation and conversion of units of measure, using</p>

				years to months; weeks to days	imperial units such as inches, pounds and pints	decimal notation up to three decimal places where appropriate I can convert between miles and kilometres
Geometry: Properties of Shape - identifying shapes and their properties	I can recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].	I can identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line I can identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces I can identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]		I can identify lines of symmetry in 2-D shapes presented in different orientations	I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations	I can recognise, describe and build simple 3-D shapes, including making nets I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
Geometry: Properties of Shape – drawing & constructing			I can draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	I can complete a simple symmetric figure with respect to a specific line of symmetry	I can draw given angles, and measure them in degrees ($^{\circ}$)	I can draw 2-D shapes using given dimensions and angles I can recognise, describe and build simple 3-D shapes, including making nets

<p>Geometry: Properties of Shape – comparing & classifying</p>		<p>I can compare and sort common 2-D and 3-D shapes and everyday objects</p>		<p>I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p>	<p>I can use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p>	<p>I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</p>
<p>Geometry: Properties of Shape - angles</p>			<p>I can recognise angles as a property of shape or a description of a turn</p> <p>I can 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>I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines</p>	<p>I can identify acute and obtuse angles and compare and order angles up to two right angles by size</p>	<p>I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>identify:</p> <ul style="list-style-type: none"> * angles at a point and one whole turn (total 360o) * angles at a point on a straight line and ½ a turn (total 180o) * other multiples of 90o 	<p>I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</p>
<p>Geometry: Position & Direction - position, direction and movement</p>	<p>I can describe position, direction and movement, including half, quarter and three-quarter turns.</p>	<p>I can 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</p>		<p>I can describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>I can describe movements between positions as translations of a given unit to the left/right and up/down</p>	<p>I can 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>	<p>I can describe positions on the full coordinate grid (all four quadrants)</p> <p>I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>

		anti-clockwise)		I can plot specified points and draw sides to complete a given polygon		
Geometry: Position & Direction - pattern		I can order and arrange combinations of mathematical objects in patterns and sequences				
Statistics - interpreting, constructing and presenting data		<p>I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p> <p>I can ask and answer questions about totaling and comparing categorical data</p>	I can interpret and present data using bar charts, pictograms and tables	I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	I can complete, read and interpret information in tables, including timetables	I can interpret and construct pie charts and line graphs and use these to solve problems
Statistics – solving problems			I can 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.	I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	I can solve comparison, sum and difference problems using information presented in a line graph	I can calculate and interpret the mean as an average

<p>Algebra - equations</p>	<p>I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = * - 9$</p> <p>I can represent and use number bonds and related subtraction facts within 20</p>	<p>I can recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.</p> <p>I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p>	<p>I can solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p>solve problems, including missing number problems, involving multiplication and division, including integer scaling</p>	<p><i>use the properties of rectangles to deduce related facts and find missing lengths and angles</i></p>	<p>I can express missing number problems algebraically</p> <p>I can find pairs of numbers that satisfy number sentences involving two unknowns</p> <p>I can enumerate all possibilities of combinations of two variables</p>
<p>Algebra - formulae</p>					<p>I can use simple formulae</p> <p>I can recognise when it is possible to use formulae for area and volume of shapes</p>
<p>Algebra - sequences</p>	<p><i>sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening</i></p>	<p><i>compare and sequence intervals of time</i></p> <p><i>order and arrange combinations of mathematical objects in patterns</i></p>			<p>I can generate and describe linear number sequences</p>

Moving forward together