



Primary School and Children's Centre

2014

Primary Maths Curriculum

Guidance:

This document has been produced to support in planning, teaching and assessing the new 2014 curriculum for Mathematics.

The new "End of Year" curriculum objectives are highlighted in yellow. Up to three 'stepping stones' have been provided for each Year Group objective. These are suggested skills that children should have learnt before moving on to the new end of year objective. In many cases these have been taken from APP documents or the previous Year Group's program of study from the 2014 curriculum. These 'stepping stones' are for advice only and are by no means definitive or the only route into an objective.

Year R		Step 1	Step 2	Step 3	End of Year Expectations
Using and Applying	Problem solving	and objects and to solve problems			
Number	Number system	<p>I can count forwards to 3</p> <p>I can order numbers 0 to 3</p> <p>I can recognise which number is one more/less for numbers 0 to 3</p>	<p>I am beginning to count forwards to 10</p> <p>I am beginning to order numbers from 0 to 10</p> <p>I am beginning to recognise which number is one more/less for numbers 0 to 10</p>	<p>I can count forwards to 10</p> <p>I can order numbers from 0 to 10</p> <p>I can recognise which number is one more/less for numbers 0 to 10</p>	<p>I can count forwards to 20, beginning from 0</p> <p>I can order numbers from 0 to 20</p> <p>I can recognise which number is one more/less for numbers 0 to 20</p>
	Fractions and decimals	I am beginning to understand the vocabulary of half	I am beginning to recognise one half of an object (e.g. orange)	I am beginning to recognise one half of a shape	I can recognise one half of an object or shape
Calculating	Addition and Subtraction	Using objects, I can add two 1-digit numbers by counting on to find the answer	Using objects, I can subtract two 1-digit numbers by counting back to find the answer	Using quantities, I am beginning to add and subtract two 1-digit numbers by counting on and back to find the answer	Using quantities and objects, I can add and subtract two 1-digit numbers by counting on and back to find the answer
	Multiplication and Division	I am beginning to understand the vocabulary related to doubling, halving and sharing	I can practically double a number of objects to 10	I can practically half an even number of objects to 10	I can solve problems involving doubling and halving using sharing

Year R	Step 1	Step 2	Step 3	End of Year Expectations
Shape	<p>I am developing the vocabulary of pattern</p> <p>I am beginning to recognise different objects</p>	<p>I am beginning to recognise patterns</p> <p>I can recognise different objects</p>	<p>I am beginning to describe patterns using mathematical vocabulary</p> <p>I can identify everyday shapes (circle, triangle, square, rectangle)</p>	<p>I can recognise, create and describe patterns</p> <p>I can explore characteristics of everyday objects and shapes and use mathematical language to describe them</p>
Space	With support, I am beginning to recognise positional language (e.g. underneath, on top)	I am beginning to recognise positional language (e.g. underneath, on top)	I am beginning to use everyday language to talk about position (e.g. beside, next to, between)	I can use everyday language to talk about position
Measures	I can use everyday language to talk about size, weight, capacity and distance	I can use everyday language to talk about time and money	I am beginning to compare quantities and objects to solve problems using everyday language	I can use everyday language to talk about size, weight, capacity, distance time and money to compare quantities and objects and to solve problems

Year 1		Step 1	Step 2	Step 3	End of Year Expectation
Using and Applying	Problem solving	<ul style="list-style-type: none"> I can solve one-step problems that can involve addition and subtraction, using concrete objects and pictorial representations 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 compare, describe and solve practical problems for: <ul style="list-style-type: none"> Lengths and heights (e.g. long/short, longer/ shorter, tall/ short, double/half) Mass or weight (e.g. heavy/light, heavier than, lighter than) Capacity/ volume (full/empty, more than, less than, quarter) Time (quicker, slower, earlier, later) 			
Number	Number system	<ul style="list-style-type: none"> I can count to 10, forwards and backwards, beginning from 0 or 1 I can count, read and write numbers to 10 I can count in multiples of ten I am beginning to know one more/less for number to 10 I am beginning to identify and represent number using objects and use the language more/ less I am beginning to read and write numbers from 1 to 10 in numerals and words 	<ul style="list-style-type: none"> I can count across 10 to 20, forwards and backwards, beginning from 0 or 1, or from any given number I can count, read and write numbers to 20 I can count in multiples of fives I know one more/less for numbers to 10 I can identify and represent numbers using objects and use the language more/less (fewer) most and least I can read and write numbers from 1 to 10 in numerals and words 	<ul style="list-style-type: none"> I can count across 20 to 50, forwards and backwards, beginning from 0 or 1, or from any given number I can count, read and write numbers to 50 I can count in multiples of twos I know one more/less for numbers to at least 10 I am beginning to identify and represent numbers using pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least I am beginning to read and write numbers from 1 to 20 in numerals and words 	<ul style="list-style-type: none"> I can count to and across 100, forwards and backwards, beginning from 0 or 1, or from any given number I can count, read and write numbers to 100 in numerals I can count in multiples of twos, five and tens When given a number, I can identify one more and one less I can identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most and least I can read and write numbers from 1 to 20 in numerals and words
	Fractions and decimals	<ul style="list-style-type: none"> I can recognise, find and name a half as one of two equal parts of an object I can recognise, find and name a quarter as one of four equal parts of an object 	<ul style="list-style-type: none"> I can recognise, find and name a half as one of two equal parts of a shape I can recognise, find and name a quarter as one of four equal parts of a shape 	<ul style="list-style-type: none"> I am beginning to recognise, find and name a half as one of two equal parts of a quantity I am beginning to recognise, find and name a quarter as one of four equal parts of a quantity 	<ul style="list-style-type: none"> I can recognise, find and name a half as one of two equal parts of an object, shape or quantity I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity
Calculating	Addition and Subtraction	<ul style="list-style-type: none"> I am beginning to know that addition is the combining of two groups of objects and subtraction is taking them away I can recall addition facts to 10 I can add two 1-digit numbers I can record my work using +, - and = 	<ul style="list-style-type: none"> I know that addition is the total of two sets and that subtraction is taking away and finding out how many are left I can use addition facts to 10 to determine related subtraction facts I can subtract two 1-digit numbers I am beginning to work out the value of a missing number 	<ul style="list-style-type: none"> I can use the vocabulary related to addition and subtraction I can recall addition facts to 20 I am beginning to add and subtract 1-digit and 2-digit numbers to 20, including zero I can work out the value of a missing number, e.g. $30 - ? = 24$ 	<ul style="list-style-type: none"> I can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs I can represent and use number bonds and related subtraction facts within 20 I can add and subtract 1-digit and 2-digit numbers to 20, including zero I can solve missing number problems such as $7 = ? - 9$

	Multiplication and Division	<ul style="list-style-type: none"> I can solve one-step problems involving multiplication and division, by calculating the answer using concrete objects 	<ul style="list-style-type: none"> I can solve one-step problems involving multiplication and division, by calculating the answer using pictorial representations 	<ul style="list-style-type: none"> I am beginning to solve one-step problems involving multiplication and division, by calculating the answer using arrays with the support of the teacher 	<ul style="list-style-type: none"> 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
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Year 1		Step 1	Step 2	Step 3	End of Year Expectations
Geometry	Properties	<ul style="list-style-type: none"> I am beginning to recognise 2-D shapes 	<ul style="list-style-type: none"> I can recognise and name 2-D shapes 	<ul style="list-style-type: none"> I am beginning to recognise 3-D shapes 	<ul style="list-style-type: none"> I can recognise and name common 2-D shapes including: <ul style="list-style-type: none"> 2-D shapes (e.g. rectangles (including squares), circles and triangles) 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres)
	Position and direction	<ul style="list-style-type: none"> I can describe positions (eg behind, on top of) 	<ul style="list-style-type: none"> I know forwards, backwards and half turn 	<ul style="list-style-type: none"> I am beginning to recognise quarter and three-quarter turns 	<ul style="list-style-type: none"> I can describe position, directions and movements, including half, quarter and three-quarter turns
Measurement		<ul style="list-style-type: none"> I am beginning to compare and describe: <ul style="list-style-type: none"> Lengths and heights (e.g. long/short) Mass or weight (e.g. heavy/light) Capacity/ volume (full/empty,) Time (quick, slow) I am beginning to measure : <ul style="list-style-type: none"> Lengths and heights Mass/weight Capacity and volume Time (hours, minutes, seconds) I am beginning to understand the language involved with money I am beginning to recognise the language first, next, today, yesterday and tomorrow 	<ul style="list-style-type: none"> I can compare and describe: <ul style="list-style-type: none"> Lengths and heights (e.g. longer/ shorter, tall/ short, double/half) Mass or weight (e.g. heavier than, lighter than) Capacity/ volume (e.g. more than, less than, quarter) Time (e.g. quicker, slower, earlier, later) I can measure: <ul style="list-style-type: none"> Lengths and heights Mass/weight Capacity and volume Time (hours, minutes, seconds) I can recognise that money has a value I can recognise the language first, next, today, yesterday and tomorrow 	<ul style="list-style-type: none"> I am beginning to solve practical problems for: <ul style="list-style-type: none"> Lengths and heights (e.g. long/short, longer/ shorter, tall/ short, double/half) Mass or weight (e.g. heavy/light, heavier than, lighter than) Capacity/ volume (full/empty, more than, less than, quarter) Time (quicker, slower, earlier, later) I am beginning to record: <ul style="list-style-type: none"> Lengths and heights Mass/weight Capacity and volume Time (hours, minutes, seconds) I am beginning to recognise different denominations of coins I am beginning to sequence events in a chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening 	<ul style="list-style-type: none"> I can compare, describe and solve practical problems for: <ul style="list-style-type: none"> Lengths and heights (e.g. long/short, longer/ shorter, tall/ short, double/half) Mass or weight (e.g. heavy/light, heavier than, lighter than) Capacity/ volume (full/empty, more than, less than, quarter) Time (quicker, slower, earlier, later) I can measure and record the following: <ul style="list-style-type: none"> Lengths and heights Mass/weight Capacity and volume Time (hours, minutes, seconds) I can recognise and know the value of different denominations of coins and notes I can sequence events in a chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening

	<ul style="list-style-type: none">• I am beginning to recognise the days of the week• I am beginning to tell the time to the hour	<ul style="list-style-type: none">• I know the days of the week• I can tell the time to the hour and draw the hands on a clock face to show these times	<ul style="list-style-type: none">• I am beginning to know the months of the year• I am beginning to tell the time to half past	<ul style="list-style-type: none">• I can recognise and use language relating to dates, including days of the week, weeks, months and years• 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
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Year 2		Step 1	Step 2	Step 3	End of Year Expectations
Using and Applying	Problem solving	<ul style="list-style-type: none"> I can use place value and number facts to solve problems I can solve problems with addition and subtraction: <ul style="list-style-type: none"> using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying my increasing knowledge of mental and written methods I can solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change 			
Number	Number system	<ul style="list-style-type: none"> I can count in steps of 2, 5 and 10 forwards. I can recognise the value of 1-digit number as a unit value I can partition numbers into tens and ones using practical apparatus I can order numbers from 0 to 100 I can read and write numbers to 50 in words 	<ul style="list-style-type: none"> I can count in steps of 2, 5 and 10 forwards and backwards I can recognise the value of the tens digit in multiples of 10 I can partition numbers into tens and ones using a number sentence I can compare numbers from 0 to 100 using mathematical language I can read and write numbers to at least 100 	<ul style="list-style-type: none"> I can count in steps of 3 forwards, and in tens from any number forwards I am beginning to understand place value of 2-digit numbers I can partition numbers in different ways (e.g. $23 = 20 + 3$; $23 = 10 + 13$) I am beginning to use $<$, $>$ and $=$ signs when comparing and ordering numbers I am beginning to read and write numbers to at least 100 in words 	<ul style="list-style-type: none"> I can count in steps of 2, 3 and 5 from 0, and in tens from any number forward and backward I can recognise the place value of each digit in a 2-digit number (tens and ones) I can identify, represent and estimate number using different representations including number line I can compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs I can read and write numbers to at least 100 in numerals and in words
	Fractions and decimals	<ul style="list-style-type: none"> I can recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a shape I am beginning to write simple fractions e.g. $\frac{1}{2}$ of $6 = 3$ 	<ul style="list-style-type: none"> I can recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length I can write simple fractions e.g. $\frac{1}{2}$ of $6 = 3$ 	<ul style="list-style-type: none"> I am beginning to recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a set of objects or quantity I am beginning to recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. 	<ul style="list-style-type: none"> 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 I can write simple fractions e.g. $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
Calculating	Addition and Subtraction	<ul style="list-style-type: none"> I am beginning to recall and use addition and subtraction facts to 20 I can add and subtract numbers using concrete objects, including: <ul style="list-style-type: none"> A 2-digit number and ones A 2-digit number and tens Two 2-digit numbers Adding three 1-digit numbers 	<ul style="list-style-type: none"> I can recall and use addition and subtraction facts to 20 fluently I can add and subtract numbers using pictorial representations, including: <ul style="list-style-type: none"> A 2-digit number and ones A 2-digit number and tens Two 2-digit numbers Adding three 1-digit numbers 	<ul style="list-style-type: none"> I am beginning to derive and use related facts up to 100 I am beginning to add and subtract numbers mentally, including: <ul style="list-style-type: none"> A 2-digit number and ones A 2-digit number and tens Two 2-digit numbers Adding three 1-digit numbers 	<ul style="list-style-type: none"> I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 I can add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> A 2-digit number and ones A 2-digit number and tens Two 2-digit numbers Adding three 1-digit numbers

		<ul style="list-style-type: none"> I know that addition / subtraction are inverse operations 	<ul style="list-style-type: none"> I can make all related number statements (e.g. $6+8=14$, $8+6=14$, $14-8=6$, $14-6=8$) 	<ul style="list-style-type: none"> I am beginning to show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot I can work out the value of a missing number, e.g. $30 - ? = 24$ 	<ul style="list-style-type: none"> I can show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot I can recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems
	Multiplication and Division		<ul style="list-style-type: none"> I can recall and use multiplication and division facts for the 10 times tables I can record my work in a written form using mathematical symbols (see above) 	<ul style="list-style-type: none"> I can recall and use multiplication and division facts for the 5 times tables, including recognising odd and even numbers I can record my work in a written form using mathematical symbols (see above) I am beginning to recognise that multiplication of two numbers can be done in any order and division of one number by another cannot 	<ul style="list-style-type: none"> 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 calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (\div) and equals (=) signs I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot

Year 2		Step 1	Step 2	Step 3	End of Year Expectations
Geometry	Properties	<ul style="list-style-type: none"> I am beginning to describe the properties of 2-D shapes I am beginning to describe the properties of 3-D shapes 	<ul style="list-style-type: none"> I can describe the properties of 2-D shapes including the number of sides I can describe the properties of 3-D shapes 	<ul style="list-style-type: none"> I am beginning to recognise symmetry in 2-D shapes I am beginning to recognise the number of edges, vertices and faces in 3-D shapes I am beginning to recognise 2-D shapes on the surface of 3-D shapes 	<ul style="list-style-type: none"> I can identify and describe the properties of 2-D shapes, including the number of sides and 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

		<ul style="list-style-type: none"> I am beginning to compare 2-D and 3-D shapes 	<ul style="list-style-type: none"> I can compare 2-D and 3-D shapes 	<ul style="list-style-type: none"> I am beginning to sort 2-D and 3-D shapes in everyday objects 	<ul style="list-style-type: none"> I can compare and sort common 2-D and 3-D shapes and everyday objects
	Position and direction	<ul style="list-style-type: none"> I can use mathematical vocabulary to describe position, 	<ul style="list-style-type: none"> I can use mathematical vocabulary to describe direction and movement including distinguishing between rotation as a turn 	<ul style="list-style-type: none"> I can order and arrange combinations of mathematical objects I can use mathematical vocabulary in terms of right angles for quarter, half and three-quarter turns (clockwise) 	<ul style="list-style-type: none"> I can order and arrange combinations of mathematical objects in patterns I can use mathematical vocabulary to describe position, direction and movement including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise), and movement in a straight line
Measurement	<ul style="list-style-type: none"> Using standard units I can estimate length/ height in any direction (m/cm); mass (kg/g);temperature (C); capacity (litres/ml) I can compare lengths, mass, volume/capacity I am beginning to recognise and use the symbols for pounds (£) and pence (p) I am beginning to add/ subtract using money 	<ul style="list-style-type: none"> I am beginning to measure length/ height in any direction (m/cm); mass (kg/g);temperature (C); capacity (litres/ml) I can order lengths, mass, volume/capacity I can recognise and use the symbols for pounds (£) and pence (p) I can add/ subtract using money 	<ul style="list-style-type: none"> I can measure to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels I am beginning to record my results using <, > and = I am beginning to combine amounts to make a particular value I am beginning to find combinations of coins that equal the same amounts of money 	<ul style="list-style-type: none"> 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 I can compare and order lengths, mass, volume/capacity and record the results using <, > and = I can recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value I can find different combinations of coins that equal the same amounts of money 	

	<ul style="list-style-type: none"> • I am beginning to solve addition/subtraction problems involving money • I can compare different times • I am beginning to know quarter past/to the hour • I am beginning to recognise minutes 	<ul style="list-style-type: none"> • I can solve simple addition/subtraction problems involving money • I am beginning to work out time durations for half/ quarter hours • I can draw the hands on a clock to show quarter hours • I know the amount of minutes in an hour 	<ul style="list-style-type: none"> • I am beginning to solve problems involving giving change • I can work out time durations that do not go over the hour • I can tell the time in 5 minute intervals and begin to write the hands on a clock to show these times • I am beginning to know the amount of hours in a day 	<ul style="list-style-type: none"> • I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change • I can compare and sequence intervals of time • 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. • I know the number of minutes in an hour and the number of hours in a day
Statistics	<ul style="list-style-type: none"> • I can discuss how I collected the data • I can discuss the data I have collected 	<ul style="list-style-type: none"> • I can collect data and record it in a simple list or tally chart • I can answer questions about the data I have collected • I am beginning to compare the data 	<ul style="list-style-type: none"> • I can collect data and record it in a simple pictogram or block diagram • I can draw simple conclusions about the data that I have collected • I can make comparisons about the data I have collected 	<ul style="list-style-type: none"> • I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables • I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • I can ask and answer questions about totalling and comparing categorical data

Year 3		Step 1	Step 2	Step 3	End of Year Expectations
Using and Applying	Problem solving	I can solve number problems and practical problems involving these ideas			
Number	Number system & Counting	<ul style="list-style-type: none"> I can count from 0 in steps of 1 and 2 	<ul style="list-style-type: none"> I can read and write numbers up to 100 in numerals (2b) I can count from 0 in steps of 5, 10 and 100 (2c) I can recognise and partition a 2 digit number. 	<ul style="list-style-type: none"> I can read and write numbers up to 100 in words (2b) I can count in steps of 2, 3,5 and 10 from any given number I can recognise the value of the hundreds digit I can compare and order numbers to at least 100 (2a) 	<ul style="list-style-type: none"> I can read and write numbers up to 1,000 in numerals and in words.(3b) I can count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number (3b) I can recognise the place value of each digit in a 3-digit number (H, T, U) I can compare and order numbers up to 1,000 I can identify, represent and estimate numbers using different representations* <p>*(Allow children to use range of apparatus such as Numicon, counting sticks, cubes, 100 squares etc)</p>
	Fractions and decimals		<ul style="list-style-type: none"> I can find $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ of a set of objects and shade a shape including those divided into equal regions. (2a) (Y2) 	<ul style="list-style-type: none"> I can count up and down in halves and quarters I can use fractions such as $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$/$\frac{3}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{10}$ for sets of objects (3a) 	<ul style="list-style-type: none"> I can 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 I can recognise, find and write fractions of a discrete set of objects: unit fractions and non-denominators I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
			<ul style="list-style-type: none"> I can recognise, find and name a half as one of two equal parts of an object, shape or quantity (Yr1) 	<ul style="list-style-type: none"> 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 and set of objects or quantity (Yr2) 	<ul style="list-style-type: none"> I can recognise and show, using diagrams, equivalent fractions with small Denominators

			<ul style="list-style-type: none"> I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. (Yr1) 	<ul style="list-style-type: none"> I can write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$ (Yr2) 	<ul style="list-style-type: none"> I can add and subtract fractions with the same denominator within one whole [for example, $\frac{1}{2} + \frac{1}{2} = 1$] I can compare and order unit fractions, and fractions with the same denominators I can solve problems that involve all of the above
Calculating	Addition & Subtraction	<ul style="list-style-type: none"> I can add a three-digit number and 1s (HTU+U) I can add and subtract up to 3 digit numbers informally I can begin to estimate the answer to a calculation 	<ul style="list-style-type: none"> I can add a three-digit number and 10s (HTU+TU) I can add and subtract numbers with 2 digits, using formal written methods of columnar addition and subtraction without bridging 10 I can estimate the answer to a calculation and say whether my answer is likely. I can solve simple addition and subtraction problems (2c) 	<ul style="list-style-type: none"> I can add a three-digit number and 100s (HTU+HTU) I can add and subtract numbers with 2 digits, using formal written methods of columnar addition and subtraction I can make all related number sequences (e.g. 6+8=14, 8+6=14, 14-6=8, 14-8=6) (3a) Solve one step problems in context, deciding which operations and methods to use and why (2b) 	<ul style="list-style-type: none"> I can add and subtract numbers mentally. I can add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction I can estimate the answer to a calculation and use inverse operations to check answers I can solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
	Multiplication & Division	<ul style="list-style-type: none"> I can count in 2, 5 and 10 I can relate times table facts to multiples of 10, e.g. $2 \times 3 = 6$ so $2 \times 30 = 60$; $6 \div 2 = 3$ so $60 \div 2 = 30$ 	<ul style="list-style-type: none"> I know my 2, 5 and 10 times tables. I can mentally calculate $TU \times U$ and $TU \div U$ using my times table facts using jottings to support 	<ul style="list-style-type: none"> I know my 2, 5 and 10 times tables and related division facts I can mentally calculate $TU \times U$ and $TU \div U$ using my times table facts 	<ul style="list-style-type: none"> Recall and use multiplication and division for the 3,4 and 8 times tables I can write and calculate mathematical statements for multiplication and division using the multiplication facts that they know including $TU \times U$, using mental and then progressing to formal written methods.

		<ul style="list-style-type: none"> I can find a division fact from a multiplication fact (3c) 	<ul style="list-style-type: none"> I can find the associated number statements for a given number fact. (3b) 	<ul style="list-style-type: none"> I can use inverses in number problems (3a) E.g. I think of a number, double it and add 5. The answer is 35. What was my number? 	<ul style="list-style-type: none"> I can solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects
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Year 3	Step 1	Step 2	Step 3	End of Year Expectations
Geometry – Properties of Shape	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> I can name a circle, square, triangle, rectangle, pentagon, hexagon, octagon, cube, cylinder, sphere, cuboid, cone, pyramid I know the difference between straight and turning movements <ul style="list-style-type: none"> -I know left/right -I know clockwise / anticlockwise (2b) 	<ul style="list-style-type: none"> I can describe the properties of shapes learnt (eg flat faces, curved edges) I can recognise right angles/quarter turns (2a) I can give directions using 90° /quarter turns (3a) I can understand parallel and perpendicular (5c) 	<ul style="list-style-type: none"> draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them recognise angles as a property of shape or a description of a turn identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines

Measurement	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • I can compare, describe and solve practical problems for: <ul style="list-style-type: none"> - Lengths and heights - Mass or weight - Capacity/volume (full/empty, more, less, quarter) - Time (Earlier / later) (Yr 1) • I can measure and begin to record the following: <ul style="list-style-type: none"> - Lengths and heights - Mass and weight - Capacity and volume - Time (hours, mins, seconds) (Yr 1) • I can recognise and know the value of different denominations of coins (Yr 1) • I can tell the time to the hour and half past the hour and draw hands on a clock face to show these times (Yr 1) 	<ul style="list-style-type: none"> • I can compare and order lengths, mass, volume/ capacity, and record the results using < > and = (Yr2) • I can solve simple problems in a practical context involving the addition and subtraction of money of the same unit, including giving change. (Yr 2) • I can tell and write the time to five minutes, including quarter past/ to the hour and draw hands on a clock face to show these times (Yr 2) • I know the number of minutes in an hour and hours in a day (Yr 2) 	<ul style="list-style-type: none"> • I can measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • I can measure the perimeter of simple 2-D shapes • I can add and subtract amounts of money to give change, using both £ and p in practical contexts • 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 can 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, am/pm, morning, afternoon, noon and midnight • I know the number of seconds in a minute and the number of days in each month, year and leap year
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			<ul style="list-style-type: none"> I can compare and sequence time intervals (Yr 2) 	<ul style="list-style-type: none"> I can compare durations of events [for example, to calculate the time taken by particular events or tasks]
<p>Statistics</p>		<ul style="list-style-type: none"> I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity (Yr 2) 	<ul style="list-style-type: none"> I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables (Yr 2) I can ask and answer simple questions about totalling and comparing categorical data. (Yr 2) 	<ul style="list-style-type: none"> I can interpret and present data using bar charts, pictograms and tables I can solve one-step and two-step questions [for example 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables

Year 4		Step 1	Step 2	Step 3	End of Year Expectations
Using and Applying	Problem solving	I can solve number and practical problems using all of my number skills.			
Number	Number system	<ul style="list-style-type: none"> I can count from 0 in steps of 5, 10 and 100 (2c) I can round 2 digit numbers to the nearest 10 I can read Roman numerals to 10 (I to X) 	<ul style="list-style-type: none"> I can count in steps of 2, 3, 5 and 10 from any given number I can recognise the place value of each digit in a two digit number (T, U) (2b) I can compare and order numbers up to 100 (2b) I can round 3 digit numbers to the nearest 10 or 100 (3b) I can read Roman numerals to 20 (I to XX) 	<ul style="list-style-type: none"> I can count from 0 in multiples of 4, 8, 50 and 100. (3b times table) I can recognise the place value of each digit in a three digit number (H, T, U) (3b) I can compare and order numbers up to 1000 (3b) I can round 4 digit numbers to the nearest 10, 100 and 1000 (4c) I can compare and order decimal numbers with one decimal place (4c) I can read Roman numerals to 50 (I to L) 	<ul style="list-style-type: none"> I can count in multiples of 6, 7, 9, 25 and 1000 (3b/3a times tables) I can find 1000 more or less than a given number I can count backwards through 0 using negative numbers I can recognise the place value of each digit in a four-digit number (Th, H, T, U) (4c) I can compare and order numbers beyond 1000 (4c) I can identify, represent and estimate numbers using different representations * I can round any number to the nearest 10, 100 and 1000. (4b) Round decimals with one decimal place to the nearest whole number I can compare and order decimal numbers with up to two decimal places (4b) I can read Roman numerals to 100 (I to C) and I understand how numbers developed to include 0.

	Fractions and decimals		<ul style="list-style-type: none"> I can find equivalent fractions for a $\frac{1}{2}$ (3a) (Y2) I can count up and down in halves and quarters (Y3) I can solve simple measure and money problems involving whole numbers 	<ul style="list-style-type: none"> I can recognise and show equivalent fractions with small denominators (Y3) I can count up and down in tenths; recognise that tenths arise when dividing an object by 10. (Y4) I can use fractions such as $\frac{1}{4}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{10}$, for sets of objects (3a) I can add and subtract fractions with the same denominator within a whole (Yr3) I can recognise and write the decimal equivalents of tenths I can solve simple measure and money problems involving fractions and decimals to one d.p. 	<ul style="list-style-type: none"> I can recognise and show, using diagrams, families of common equivalent fractions (4c) I can count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten I can solve problems involving increasingly harder fractions to calculate quantities and fractions divide quantities, including non-unit fractions where the answer is a whole number (4c) I can add and subtract fractions with the same denominator I can recognise and write decimal equivalents of any number of tenths or hundredths (4b) I can recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$* I can solve simple measure and money problems involving fractions and decimals to two d.p.
Calculating	Addition & Subtraction	<ul style="list-style-type: none"> I can add and subtract 2 digit numbers using columnar addition without bridging 10 I can solve simple addition and subtraction problems (2c) 	<ul style="list-style-type: none"> I can add and subtract 2 digit numbers using columnar methods (3b) I can find fact families for an addition or subtraction fact (2b) I am beginning to estimate the answer to a calculation I can solve one-step problems in contexts, deciding which operations to use and why (2b) 	<ul style="list-style-type: none"> I can add and subtract 3 digit numbers using columnar methods (3b) I can use inverses in number problems (e.g. I think of a number and add 3) (3a) I can estimate the answer to a calculation and say whether my answer is likely I can solve more complex one-step problems in contexts, deciding which operations to use and why (3c) 	<ul style="list-style-type: none"> I can add and subtract numbers up to 4 digits using columnar methods (4c) I can estimate and use inverse operations to check answers to a calculation I can solve addition and subtraction two-step problems in contexts, deciding which operations to use and why (3b)

	<p>Multiplication & Division</p>	<ul style="list-style-type: none"> I can recall multiplication and division facts for the 2, 5 and 10 x table (2a) I can multiply and divide using practical resources 	<ul style="list-style-type: none"> I can recall multiplication and division facts for the 2, 3, 4, 5, 6, and 10 x table (3b) I can find factors for numbers to 20 I can multiply and divide a two-digit number by a one digit number using an informal method (e.g. number line) I can multiply a whole number by 10 (3b) 	<ul style="list-style-type: none"> I can recall multiplication and division facts for the 7, 8 and 9 x table (3a) I can use my multiplication tables knowledge to calculate with multiples of ten (4b) I can find factors for numbers to 50 I can multiply and divide a two-digit number by a one-digit number using a formal layout (3b) I can divide a whole number by 10 with a whole number answer (3a) 	<ul style="list-style-type: none"> I can recall multiplication and division facts up to 12x12 (4c) I can use place value, know n and derived facts to multiply and divide mentally, including multiplying and dividing by 0 and 1; dividing by 1; multiplying together three numbers I can recognise and use factor pairs and commutativity in mental calculations (4b) I can multiply two-digit and three-digit numbers by a one-digit number using a formal layout (3a) 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 units, tenths and hundredths (4c) I can solve problems involving multiplying and adding, including integer scaling problems and harder correspondence problems such as n objects are connected to m objects
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Year 4	Step 1	Step 2	Step 3	End of Year Expectations
Geometry – Properties of Shape	<ul style="list-style-type: none"> I can name and identify regular 2d shapes (2a) I can recognise right angles as quarter turns (2a) I can find lines of symmetry in squares and rectangles 	<ul style="list-style-type: none"> I can name and identify right angled, equilateral, isosceles and scalene triangles (4b) I can identify right angles in different orientations (3c) I can identify lines of symmetry in squares, rectangles and triangles 	<ul style="list-style-type: none"> I can name and identify all quadrilaterals I can identify acute and obtuse angles (3b) I can identify lines of symmetry in regular 2D shapes 	<ul style="list-style-type: none"> I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes (5c) I can identify acute and obtuse angles and compare and order angles up to two right angles (180°) by size (3a) I can identify lines of symmetry in 2D shapes presented in different orientations I can complete a simple symmetric figure with respect to a specific line of symmetry
Position and Direction			<ul style="list-style-type: none"> I can plot coordinates in the first quadrant (4c) 	<ul style="list-style-type: none"> I can describe positions on a 2D grids as coordinates in the first quadrant (4c) I can describe movements between positions as translations of a given unit to the left/right and up/down (4b) I can plot specified points and draw sides to complete a given polygon (4b)

Measurement	<ul style="list-style-type: none"> I can convert between units of length (mm, cm, m, km) I am beginning to find the perimeter of squares and rectangles (3a) I can tell the time to the nearest minute (3b) I can solve simple conversion problems 	<ul style="list-style-type: none"> I can convert between units of length and capacity (ml, l) I can find the perimeter of simple shapes (e.g. squares and rectangles) (4c) I can find the area of a shape by counting squares (4a) I can tell the time, know am/pm and I can calculate time intervals (3a) I can solve one-step conversion problems in contexts, deciding which operations to use and why 	<ul style="list-style-type: none"> I can convert between units of length, capacity and time (seconds, minutes, hours, days) I can find the length of a rectangle given the perimeter and width (5c) I can use the formula $L \times B$ to find the area of square/rectangle (5c) I can read and write analogue and digital time I can solve more complex one-step conversion problems in contexts, deciding which operations to use and why 	<ul style="list-style-type: none"> I can convert between different units of measure (e.g. km to m; hr to min) I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres (5a) I can find the area of rectilinear shapes by counting squares (5a) I can read, write and convert time between analogue and digits 12 and 24hr clocks (4c) I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days I can estimate, compare and calculate different measures, including money in pounds and pence
Statistics	<ul style="list-style-type: none"> I can construct a pictogram (2b) I can solve comparison, sum and difference problems using information in pictograms 	<ul style="list-style-type: none"> I can collect data using a tally chart (3c) I can draw a bar chart (3a) I can solve comparison, sum and difference problems using information in pictograms and tables 	<ul style="list-style-type: none"> I can collect discrete data (4b) I can draw a line graph (4a) I can solve comparison, sum and difference problems using information in bar charts, pictograms and tables 	<ul style="list-style-type: none"> I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs (4a) I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Year 5		Step 1	Step 2	Step 3	End of Year Expectations	
Using and Applying Number	Problem solving Number system	I can solve number and practical problems using all of my number skills.				
		<ul style="list-style-type: none"> I can read, write and order numbers to at least 1,000 and determine the value of each digit (4c) Yr 4 I can count in tens from any number I can count backwards through 0 including negative numbers (Yr4) I can round 3 digit numbers to the nearest 10 or 100 (3b) I can read Roman numerals to 20 (I to XX) 	<ul style="list-style-type: none"> I can read, write and order numbers to at least 10,000 and determine the value of each digit I can count in hundreds from any given number I can count forwards and backwards through 0 I can round 4 digit numbers to the nearest 10, 100 and 1000 (4c) I can read Roman numerals to 50 (I to L) I can read, write, order and compare numbers with 1 d.p. (4c) I can recognise and use tenths and relate decimal equivalents I can solve problems involving numbers up to one d.p. 	<ul style="list-style-type: none"> I can read, write and order numbers to at least 100,000 and determine the value of each digit I can count in thousands from any given number I can put negative numbers onto a number line I can round any number to the nearest 10, 100 and 1000. (4b) Yr4 I can read Roman numerals to 100 (I to C) and I understand how numbers developed to include 0. Yr4 I can read, write, order and compare numbers with up to 2 d.p (4b) (Y4) I can recognise and use hundredths and relate them to tenths and decimal equivalents I can round decimals with one d.p. to the nearest whole number I can solve problems involving numbers up to two d.p. 	<ul style="list-style-type: none"> I can read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit (4a) I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through 0. I can round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 (4a) I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals I can read, write, order and compare numbers with up to 3 d.p. (4a) I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents I can round decimals with two d.p. to the nearest whole number and to one d.p. I can solve problems involving number up to three d.p. 	

	<p>Fractions and decimals</p>	<ul style="list-style-type: none"> I can compare and order fractions whose denominators are the same using resources I can find equivalent fractions for a $\frac{1}{2}$ (3a) (Y2) 	<ul style="list-style-type: none"> I can compare and order fractions whose denominators are the same I can recognise and show equivalent fractions with small denominators (Y3) I can add and subtract fractions with the same denominator within a whole (Yr3) I know the decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{3}{4}$ 	<ul style="list-style-type: none"> I can compare and order fractions whose denominators are multiples of the same number using diagrams I can recognise and show, using diagrams, families of common equivalent fractions (4c)(Y4) I can understand mixed numbers and position them on a number line (4c) I can add and subtract fractions with the same denominator (Yr4) I can multiply proper fractions by a whole number using materials and diagrams I can read and write decimal numbers as fractions over 10 and 100. I know the 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 	<ul style="list-style-type: none"> I can compare and order fractions whose denominators are multiples of the same number I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <1 as mixed numbers e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ (4b) I can add and subtract fractions with the same denominator and multiples of the same number I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams I can read and write decimal numbers as fractions (4b) I can recognise the percent symbol (%) and understand percent means number of parts per hundred and write percentages as a fraction with a denominator 100 and as a decimal (4c)* 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. *
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Calculating	Addition & Subtraction	<ul style="list-style-type: none"> I can add and subtract 3 digit numbers using columnar addition without bridging 10 I can add mentally a three digit number and a single digit number I can solve one-step problems in contexts, deciding which operations to use and why (2b) 	<ul style="list-style-type: none"> I can add and subtract 3 digit numbers using columnar addition (3b) I can add mentally a three digit number and a multiple of 10 I am beginning to use rounding to estimate the answer to a calculation I can solve more complex one-step problems in contexts, deciding which operations to use and why (3c) 	<ul style="list-style-type: none"> I can add and subtract numbers up to 4 digits using columnar addition (4c) I can add mentally a three digit number and a multiple of a hundred I can estimate the answer to a calculation using rounding and say whether my answer is likely I can solve addition and subtraction two-step problems in contexts, deciding which operations to use and why (3b) 	<ul style="list-style-type: none"> I can add and subtract whole numbers with more than 4 digits using formal columnar addition I can add and subtract numbers mentally with increasingly large numbers I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
	Multiplication & Division	<ul style="list-style-type: none"> I can find factors for numbers to 20 I can recall multiplication and division facts for the 2, 3, 4, 5, 6, and 10 x table (3b) I can divide using an informal method such as chunking I can solve one-step problems in contexts, deciding which operations to use and why (2b) 	<ul style="list-style-type: none"> I can find factors for numbers to 50 I can recall multiplication and division facts for the 7, 8 and 9 x table (3a) I can divide a two-digit number by a one-digit number using short division I can solve more complex one-step problems in contexts, deciding which operations to use and why (3c) 	<ul style="list-style-type: none"> I can recognise and use factor pairs and commutativity in mental calculations (4b) (Y4) I can recall multiplication and division facts up to 12x12 (4c) I can divide a three-digit number by a one-digit number using short division (3a) I can solve multiplication and division two-step problems in contexts, deciding which operations to use and why (3b) Solve problems involving multiplying and adding, including integer scaling problems (Yr 4) 	<ul style="list-style-type: none"> I can identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers I can multiply and divide numbers mentally using known facts I can divide numbers up to four-digits by a one-digit number using the formal written method of short division and interpret remainders appropriately according to context (4c) I can solve problems using multiplication and division and a combination of these, including understanding the equals sign I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple ratios I know and use the words prime number, prime factors and composite numbers I can tell whether a number up to 100 is a prime number and recall prime numbers up to 19

					<ul style="list-style-type: none"> I can recognise and use square numbers and cube numbers and their notation I can solve problems using multiplication and division using my knowledge of factors and multiples, squares and cubes
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Year 5	Step 1	Step 2	Step 3	End of Year Expectations
Geometry – Properties of Shape	<ul style="list-style-type: none"> I can recognise and name common 3D shapes including cuboids, cubes, pyramids and spheres (Y1) I can identify right angles in different orientations (3c) 	<ul style="list-style-type: none"> I can identify and describe the properties of 3D shapes, including the number of edges, vertices and faces (Y2) I can identify acute and obtuse angles (3b) I can name a range of 2D shapes 	<ul style="list-style-type: none"> I can make models of 3D shapes and recognise 3D shapes in different orientations (Y3) I can identify acute and obtuse angles and compare and order angles up to two right angles (180°) by size (3a) I can name 2D shapes, including irregular shapes 	<ul style="list-style-type: none"> I can identify 3D shapes, including cubes and cuboids, from 2D representations I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles I can draw given angles and measure them in degrees ($^\circ$) <p>I can 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 $\frac{1}{2}$ turn (total 180°) other multiples of 90° I can use the properties of rectangles to deduce related facts and find missing lengths and angles I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles
Position and Direction			<ul style="list-style-type: none"> I can describe movements between positions as translations of a given unit to the left/right and up/down (4b) (Y4) 	<ul style="list-style-type: none"> I can identify, describe and represent the position of a shape following a reflection or translation, including the appropriate language, and know that the shape has not changed.

Measures	<ul style="list-style-type: none"> I can convert between units of length (mm, cm, m, km) I can find the perimeter of simple shapes (e.g. squares and rectangles) (4c) I can find the area of a shape by counting squares (4a) I can solve one-step conversion problems in contexts, deciding which operations to use and why 	<ul style="list-style-type: none"> I can convert between units of length and capacity (ml, l) I can find the length of a rectangle given the perimeter and width (5c) I can use the formula $L \times B$ to find the area of square/rectangle (5c) I can solve more complex one-step conversion problems in contexts, deciding which operations to use and why 	<ul style="list-style-type: none"> I can convert between units of length, capacity and time (seconds, minutes, hours, days) I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres (5a) I can find the area of rectilinear shapes by counting squares (5a) I can compare and order different volumes I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (Y4) 	<ul style="list-style-type: none"> I can convert between different units of metric measure (e.g. km and m; cm and m; cm and mm; g and kg; l and ml) I can understand and use equivalences between metric units and common imperial units such as inches, pounds and pints (5b) I can measure and calculate the perimeter of composite rectilinear shapes in cm and m I can calculate and compare the area of squares and rectangles including using standard units cm^2 and m^2 and estimate the area of irregular shapes I can estimate volume (e.g. using 1 cm^3 blocks to build cubes and cuboids) and capacity (e.g. using water) I can solve problems involving converting between units of time I can use all four operations to solve problems including measure (e.g. length, mass, volume, money) using decimal notation including scaling
Statistics	<ul style="list-style-type: none"> I can solve comparison, sum and difference problems using information in pictograms and tables I can collect data using a tally chart (3c) I can draw a bar chart (3a) 	<ul style="list-style-type: none"> I can solve comparison, sum and difference problems using information in bar charts, pictograms and tables I can collect discrete data (4b) I can draw a line graph (4a) 	<ul style="list-style-type: none"> I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs (Y4) I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs (4a) (Y4) 	<ul style="list-style-type: none"> I can solve comparison, sum and difference problems using information presented in line graphs (5c) I can complete, read and interpret information in tables, including time tables (4c)

Year 6		Step 1	Step 2	Step 3	End of Year Expectations
Using and Applying Number	Problem solving	I can solve number problems and practical problems involving a range of ideas			
	Number system & Counting	<ul style="list-style-type: none"> I can read, write, order and compare numbers up to 10,000 and determine the value of each digit (4c) I can round 3 and 4 digit numbers to the nearest 10 and 100 (3b) I can recognise negative numbers and continue negative number sequences and find missing numbers (3a) 	<ul style="list-style-type: none"> I can read, write, order and compare numbers up to 100,000 and determine the value of each digit (4b) I can round 5 digit numbers to the nearest 10, 100 and 1000 (4b) I can put negative numbers onto a number line 	<ul style="list-style-type: none"> I can read, write, order and compare numbers up to 1,000,000 and determine the value of each digit (4a) (Y5) I can round any number up to 1,000,000 to the nearest 10, 100, 1000 and 10,000 (4a) (Y5) I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through 0 (Yr 5) 	<ul style="list-style-type: none"> I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (5a) I can round any whole number to a required degree of accuracy I can use negative numbers in context, and calculate intervals across 0 I can solve number and practical problems that involve all of the above
	Fractions and decimals	<ul style="list-style-type: none"> I can compare and order fractions whose denominators and multiples of the same number using resources I can add and subtract fractions with the same denominator (Yr4) I can multiply proper fractions by a whole number using materials and diagrams 	<ul style="list-style-type: none"> I know and can use the terms multiple and factor I can compare and order fractions whose denominators and multiples of the same number (Yr 5) I can add and subtract fractions with the same denominator and multiples of the same number (Yr 5) I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams (Yr5) 	<ul style="list-style-type: none"> I can identify common factors of pairs of numbers I can compare and order fractions, including fractions >1 using resources I recognise and understand mixed numbers I can multiply simple pairs of proper fractions I can divide proper fractions by whole numbers using diagrams 	<ul style="list-style-type: none"> I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination I can compare and order fractions, including fractions >1 I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions I can multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] I can divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]

			<ul style="list-style-type: none"> I can read and write decimal numbers as fractions and vice versa E.g. $73/100 = 0.73$ (Yr 5) I can recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ (Yr 4) 	<ul style="list-style-type: none"> I can partition decimal numbers up to 3 decimal places and state the value of each digit. I can solve problems which require the 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. * 	<ul style="list-style-type: none"> I can associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction $\frac{3}{8}$ [for example, $\frac{3}{8}$] I can identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Calculating	Addition & Subtraction	<ul style="list-style-type: none"> I can solve simple addition and subtraction problems (2c) 	<ul style="list-style-type: none"> I can add and subtract multiples of 10 and 100 to three and four digit numbers mentally I can use brackets in simple calculations (4a) I can solve more complex one step problems in context deciding which operations to use and why (3c) I can check whether my answer is likely 	<ul style="list-style-type: none"> Add and subtract numbers mentally with increasingly large numbers I can use brackets and inverses effectively e.g. $(24+P) \times 6 = 150$ I can solve addition and subtraction two-step problems in context deciding which operations and methods to use and why(3b) I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy (Yr 5) 	<ul style="list-style-type: none"> I can perform mental calculations, including with mixed operations and large numbers I can use my knowledge of the order of operations to carry out calculations involving the 4 operations I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

	<p>Multiplication & Division</p>	<ul style="list-style-type: none"> I can recall all times tables up to 12 x 12 and know related division facts. Recall and use multiplication and division facts up to 12 x 12 (Yr 4) I can use knowledge of times tables and place value to multiply U.t by U e.g. $0.6 \times 4 = 2.4$ 	<ul style="list-style-type: none"> I can multiply larger numbers (<10,000) by single-digit numbers using short multiplication I can recall all division facts related to times tables up to 12 x 12 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 1 and 0; dividing by 1; multiplying together three numbers. (Yr 4) I know multiples, factors, square numbers prime numbers (4b) I can use brackets in simple calculations (4a) I can use knowledge of times tables and place value to multiply TU.t by U e.g. $0.06 \times 4 = 0.24$ 	<ul style="list-style-type: none"> I can multiply decimals by a single-digit number using short multiplication I can divide a two digit number by 2,3,4,5, and 10 with whole number answers and remainders (3a) I can multiply and divide numbers mentally drawing on known facts. (Yr5) I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. (Yr 5) I can use brackets and inverses effectively e.g. $(24+P) \times 6 = 150$ (5c) Multiply one-digit numbers with one decimal place by whole numbers I divide HTU by U where the remainder is recorded as a fraction. 	<ul style="list-style-type: none"> I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. I can 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. I can 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 I can perform mental calculations, including with mixed operations and large numbers I can identify common factors, common multiples and prime numbers. I can use my knowledge of the order of operations to carry out calculations involving the 4 operations I can multiply one-digit numbers with up to 2 decimal places by whole numbers I can use written division methods in cases where the answer has up to 2 decimal places solve problems which require answers to be rounded to specified degrees of accuracy
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			<ul style="list-style-type: none">• I can check whether my answer is likely	<ul style="list-style-type: none">• I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy (Yr 5)	<ul style="list-style-type: none">• I can solve problems involving multiplication and division• I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
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Year 6	Step 1	Step 2	Step 3	End of Year Expectations
Geometry – Properties of Shape	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> I can name a circle, square, triangle, rectangle, pentagon, hexagon, octagon, cube, cylinder, sphere, cuboid, cone, pyramid (Yr 3) I can identify acute and obtuse angles and compare and order angles up to two right angles by size. (Yr 4) 	<ul style="list-style-type: none"> I can draw 2d shapes (Yr 3) I can make 3d shapes using modelling materials; recognise 3d shapes in different orientations and describe them. I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes (Yr 4) I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles (and right angles) (Yr 5) 	<ul style="list-style-type: none"> I can draw 2-D shapes using given dimensions and angles recognise, describe and build simple 3-D shapes, including making nets I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
Position and Direction	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> I can describe movements between positions as translations of a given unit to the left/right and up/down (Yr 4) 	<ul style="list-style-type: none"> I can describe positions on a 2D grid as coordinates in the first quadrant (Yr 4) I can identify, describe and represent the position of a shape following a reflection or a translation, using the appropriate language, and know that the shape has not changed (Yr 5) 	<ul style="list-style-type: none"> I can describe positions on the full coordinate grid (all 4 quadrants) I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Measures	<ul style="list-style-type: none"> I can convert between units of length and capacity (ml, l) I can find the length of a rectangle given the perimeter and width (5c) I can use the formula $L \times B$ to find the area of square/rectangle (5c) 	<ul style="list-style-type: none"> I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days (Y4) I can convert between units of length, capacity and time (seconds, minutes, hours, days) I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres (5a) I can find the area of rectilinear shapes by counting squares (5a) I can compare and order different volumes 	<ul style="list-style-type: none"> I can solve problems involving converting between units of time (Y5) I can convert between different units of metric measure (e.g. km and m; cm and m; cm and mm; g and kg; l and ml) (Y5) I can understand and use equivalences between metric units and common imperial units such as inches, pounds and pints (5b) I can measure and calculate the perimeter of composite rectilinear shapes in cm and m I can calculate and compare the area of squares and rectangles including using standard units cm^2 and m^2 and estimate the area of irregular shapes I can estimate volume (e.g. using 1 cm^3 blocks to build cubes and cuboids) and capacity (e.g. using water) 	<ul style="list-style-type: none"> I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate 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 3 decimal places I can convert between miles and kilometres I can recognise that shapes with the same areas can have different perimeters and vice versa I can recognise when it is possible to use formulae for area and volume of shapes I can calculate the area of parallelograms and triangles I can calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3]
Statistics	<ul style="list-style-type: none"> I can collect discrete data (4b) I can draw a line graph (4a) 	<ul style="list-style-type: none"> I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and line graphs (4a) (Y4) 	<ul style="list-style-type: none"> I can complete, read and interpret information in tables, including time tables (4c) 	<ul style="list-style-type: none"> I can interpret and construct pie charts and line graphs and use these to solve problems I can calculate and interpret the mean as an average

Algebra		<ul style="list-style-type: none"> I can use inverses in number problems (e.g I think of a number, double it and add five, the answer is 35. What is the original number) (3b) 	<ul style="list-style-type: none"> I can use symbols and letters to represent an unknown number I can use my knowledge of the order of operations to carry out calculations involving the four operations I can recognise negative numbers and continue positive negative number sequences and find missing numbers (3a) 	<ul style="list-style-type: none"> I can use simple formulae (5b) I can express missing number problems algebraically I can find pairs of numbers that satisfy an equation with 2 unknowns (5b) I can enumerate possibilities of combinations of 2 variables I can generate and describe linear number sequences
Ratio and Proportion	<ul style="list-style-type: none"> I can find simple percentages of quantities (e.g.10%, 25%, 50% and 75%) of quantities (4b) 	<ul style="list-style-type: none"> I can understand simple ratio and can solve problems involving direct proportion by scaling up/down (5b) I can find percentages (e.g. 30%, 60%) of quantities (multiples of 10) (4a) 	<ul style="list-style-type: none"> I can reduce a ratio to its simplest form and use it in problem solving by multiplying (e.g. given the ingredients in a recipe for 5 people, calculate the quantities needed for 8) (5a) I can calculate simple fractions and percentages of quantities (e.g. $\frac{3}{8}$ of 980g, 15% of 360) 	<ul style="list-style-type: none"> I can solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts I can solve problems involving similar shapes where the scale factor is known or can be found I can solve problems involving the calculation of percentages [for example, of measures such as 15% of 360] and the use of percentages for comparison (5b) I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples