My Maths Learning Journey

	Numbers to 20	Numbers to 100	+ - x ÷	Fractions	Measurement	Geometry
Year 1	I can count to 10 and 20, forwards and backwards, from any given number.	I can compare numbers to 40, using *equal to, as many as, more than, greater than* and *less than*.	I can add one-digit and two-digit numbers to 20 by using number bonds to 10 and by counting on.		I can use mathematical vocabulary such as *larger, longer, shorter, heavier, lighter, full* and *empty* to describe and compare items.	I can name positions in races and queues. I can name positions from left to right; using *before, after, next to, last* and *between.*
	I can compare numbers to 10, saying 1 more and 1 less than a given number.	I can understand that digits represent tens and ones.	I can subtract one-digit and two-digit numbers by crossing out, using number bonds and counting back (subtracting from 10 and 20).		I can measure length, height, mass, volume and capacity using non-standard units of measure such as pencils or paperclips.	I can name and identify common 2D shapes such as rectangles, squares, circles and triangles.
	I can find all the number bonds for different numbers to 10.	I can compare numbers using number bonds, hundred squares and number lines.	I can read, write and understand number sentences involving addition (+), subtraction (–) and equals (=) signs.	I can split shapes into two equal parts and four equal parts (halves and quarters).	I can estimate, measure and start to record length/height in cm, mass/weight in g, and capacity/volume in ml.	I can name and identify common 3D shapes such as cuboids, cubes, pyramids and spheres.
	I can read and write numbers from 1 to 20 in numerals and words.	I can count to and across 100, forwards or backwards, from any given number.	I can solve one-step problems that involve addition and subtraction, and missing number problems such as 7 =? – 9 (including word problems).	I can group objects into halves and quarters.	I can sequence events in chronological order using days, weeks, months and years, using words such as *next, before* and *after.*	I can group shapes using different criteria. I can make and complete different patterns with shapes.
	I can compare numbers to 20 using *equal to, as many as, more than, greater than* and *less than*.	I can read and write numbers to 100 as numerals.	I can understand multiplication as adding equal groups together including doubling numbers.	I can link fractions of shapes to fractions of numbers by sharing equally.	I can recognise the values of different coins and notes.	I can describe movements using varied language.
	I can find all the number bonds for numbers to 20.	I can count in 2s, 5s and 10s.	I can share equally by dividing even numbers into equal groups.	I can recognise, find and name half or a quarter of a objects, shapes and amounts.	I can tell the time using o'clock, half past and quarter past. I can estimate the passing of time using seconds, minutes and hours.	I can understand how to make turns using mathematical language and connect this to my knowledge of time, including the words *whole, half* and *quarter*.

My Maths Learning Journey

	Numbers to 100	+ and -	x and ÷	Fractions	Measurement	Geometry	Statistics
Year 2	I can read and write numbers to 100 in numerals.	I can use partitioning to add and subtract a two digit number and a one digit number.	I can recognise odd and even numbers.	I know that all parts of a whole must be equal. I can use the correct vocabulary to describe fractions, including *numerator, denominator, halves, quarters* and *thirds*.	I can choose the most appropriate instrument to measure with. I can read scales which use increments of ones, twos, fives and tens.	I can name a variety of 2D shapes including triangles, quadrilaterals and polygons. I can identify the number of sides and vertices 2D shapes have.	I can read information shown on simple pictograms, block diagrams, tally charts and tables.
	I can count in 2s, 3s, 5s and 10s from 0.	I can use mental methods to add and subtract two and three one-digit numbers.	I can use concrete and pictorial representations to show multiplication and division.	I can recognise and show ½, ¼, 2/4, 3/4 and 1/3 of a shape.	I can measure and record length and height in cm and m, mass in g and kg, volume in ml and l and temperature in degrees celsius.	I can identify lines of symmetry in 2D shapes. I can sort and group 2D shapes based on their properties and explain my reasons.	I can answer questions using information shown on simple pictograms, block diagrams, tally charts and tables by counting.
	I can count to and across 100, forwards and backwards, from any given number.	I can use number bonds to 10 and 20 to recall number bonds to 100. I can add and subtract a two-digit number and tens and two two-digit numbers where regrouping is not required.	I can understand multiplication as adding equal groups together and division as grouping and sharing.	I can compare and order fractions with the same denominator.	I can compare and order different lengths, masses, volumes and amounts of money using mathematical vocabulary and < > and =. I can reconise different coins and notes and state their value.	I can make and complete patterns using 2D and 3D shapes. I can translate and rotate shapes on a grid and draw their new positions.	
	I can represent numbers to 100 using apparatus, understanding the value of tens and ones. I can compare and arrange numbers within 100, including using estimation.	I can add and subtract numbers where regrouping is required. I can use estimation to check that my answers to calculations are reasonable.	I can recall multiplication and division facts for the 2, 5 and 10 times tables. I can represent multiplication and division statements using x ÷ and =.	I can count in halves, quarters and thirds across whole numbers. I can find part of a set and a quantity divided into halves, quarters and thirds.	I can recognise and use £ and p. I can find different combinations of coins that equal the same amounts of money. I can add and subtract amounts of money.	I can use mathematical vocabulary to describe rotations and translations. I can name and describe a variety of 3D shapes including spheres, cuboids, cubes, cylinders, pyramids and prisms.	I can construct my own simple pictograms, block diagrams, tally charts and tables to display data.
	I can make and complete number patterns.	I can recognise the inverse relationship between + and -. I can use my knowledge of the inverse operation to check my answers and solve missing number problems.	I can solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods including problems in context.	I can write simple fractions (e.g. ½ of 6 = 3).	I can sequence events. I know the number of minutes in an hour and the number of hours in a day. I can tell and write the time to the nearest five minutes.	I can identify the number of faces, edges and vertices of 3D shapes.	
	I can partition numbers to 100 in a variety of different ways.	I understand that addition of two numbers can be done in any order (it is commutative) but subtraction cannot.	I understand that multiplication of two numbers can be done in any order (it is commutative) but division cannot.	I can recognise that ½ is equal to 2/4 and can explain and demonstrate why.	I can calculate durations of time. I can compare durations of time using mathematical vocabulary.	I can sort and group 3D shapes based on their properties and explain my reasons.	I can answer questions using information shown on simple pictograms, block diagrams, tally charts and tables involving totalling and comparing data.

My Maths Learning Journey

	Numbers to 1000	+ and -	x and ÷	Fractions and decimals	Measurement	Geometry	Statistics
Year 3	I can count in multiples of 50. I can count in multiples of 100.	I can use mental strategies to add a three-digit number and ones, a three-digit number and tens and a three-digit number and hundreds.	I can recall multiplication and division facts for the 3, 4 and 8 times tables. I can create families of multiplication and division facts using given numbers.	I can count up and down in tenths.	I can use my knowledge of decimals to identify the value of increments of simple scales.	I understand that angles must be created by two straight lines. I can identify angles in a range of 2D shapes.	I can understand and use simple scales on pictograms and bar charts.
	I can represent numbers to 1000 using apparatus and diagrams, showing hundreds, tens and ones. I can explain the value of any given digit in a three-digit number.	I can add and subtract two three-digit numbers using a formal written method where regrouping is not required.	I can recognise whether worded problems require multiplication or division calculations to solve them.	I can add fractions with the same denominator to create one whole. I can subtract fractions with the same denominator within one whole.	I can read and write lengths in m and cm, and km and m. I can convert lengths between cm, m and km to compare them.	I can explain whether angles are greater or less than right angles and can use the terms *acute* and *obtuse*.	I can interpret data shown in pictograms to answer one-step questions.
	I can count in 4s and 8s from 0.	I can add and subtract two three-digit numbers using a formal written method where regrouping is required.	I can use my knowledge of the inverse operation to solve missing number problems.	I can recognise and show equivalent fractions of shapes (with denominators up to 12).	I can read and write masses in kg and g. I can read and write volume in l and ml.	I recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn.	I can construct my own pictograms to represent data.
	I can compare and order numbers up to 1000 using mathematical language and < > = symbols.	I can identify whether a mental strategy or a written strategy would be more appropriate to solve addition and subtraction questions and explain my reasons.	I can partition two-digit numbers to multiply them by one-digit numbers without regrouping. I can use a formal written method to multiply two-digit numbers by one-digit numbers.	I can use diagrams to recognise and show fractions in their simplest forms. I am beginning to use multiplication and division facts to show fractions in their simplest forms.	I can use notes and coins to show given amounts of money. I can add and subtract amounts of money presented in notes, coins and written using £ and p.	I understand the terms *parallel, perpendicular, horizontal* and *vertical* and can identify these lines. I can recognise, name and describe a range of 3D shapes.	I can interpret data shown on bar graphs to answer one-step questions.
	I can use number patterns to find 10 and 100 more and less than any three-digit number.	I can use bar modelling and part/part/whole diagrams to represent worded one-step addition problems across a range of contexts.	I can use a formal written method to divide two-digit numbers by one-digit numbers.	I can use diagrams to compare fractions with different denominators, using the vocabulary *greater, smaller* and *equal to*. I can find fractions of amounts (with denominators up to 12).	I can read and write the time to the nearest minute. I can tell the time using 12 and 24 hour clocks. I know the number of seconds in a minute, days in each month and days in a year.	I can describe and sort 2D and 3D shapes according to their properties. I can use given properties to draw 2D shapes and create 3D shapes.	I can construct my own bar graphs to represent data.
	I can read and write numbers up to 1000 in both numerals and words.	I can use bar modelling to represent worded one-step subtraction problems across a range of contexts.	I can use bar modelling to represent simple multiplication and division problems across a range of contexts.	I can recognise improper fractions and write these when sharing more than one whole.	I can measure the perimeters of 2D shapes. I can apply my knowledge of 2D shapes to calculate perimeters.	I can identify simple nets of a range of 3D shapes.	I can answer two-step questions using information presented in pictograms and bar charts.

My Maths Learning Journey

	Numbers to 10,000	+ and -	x and ÷	Fractions and decimals	Measurement	Geometry	Statistics
Year 4	I can represent numbers to 10, 000 using apparatus, showing thousands, hundreds, tens and ones. I can explain the value of any digit in a four-digit number. I can count in multiples of 1000.	I can add and subtract two four-digit numbers using a formal written method where regrouping is required.	I understand that multiplication is commutative but division is not. I can use known facts to calculate multiples of numbers. I can identify factors of given numbers.	I can recognise equivalent fractions and show them using diagrams. I can simplify improper fractions to show them as mixed numbers. I can place mixed numbers on a number line.	I can use my knowledge of decimals to identify the value of increments on scales. I know the number of g in 1kg, ml in 1l, mm in 1cm, cm in 1m and m in 1km.	I can identify acute, right and obtuse angles in shapes. I can compare and order angles by size using mathematical vocabulary and < > = symbols. I can draw shapes using given criteria.	I can interpret data shown on pictograms and bar graphs. I can interpret data shown on line graphs.
	I can find 1000 more and 1000 less than any four-digit number. I can compare and order numbers up to 10,000 using mathematical language and < > = symbols.	I can partition numbers and use number bonds to mentally add a four-digit number and a two-digit number.	I can identify multiples of given numbers. I can recall multiplication and division facts up to 12 x 12. I can multiply three one-digit numbers together.	I can calculate fractions of amounts. I can add and subtract fractions with the same denominator.	I can write masses, volumes and lengths of objects as decimals. I can compare masses, volumes and lengths of objects written in different units of measurement.	I can state the properties of equilateral, scalene and isosceles triangles. I can identify whether triangles are equilateral, scalene or isosceles.	I can solve addition problems using information from bar charts, pictograms, tables and line graphs.
	I can accurately place negative numbers on a number line. I can count in multiples of 25. I can count in multiples of 6, 7 and 9.	I can partition numbers and use number bonds to mentally add a four-digit number and a three-digit number.	I can partition two-digit numbers to divide them by one-digit numbers. I can partition three-digit numbers to divide them by one-digit numbers.	I can recognise and write decimal equivalents of tenths. I can recognise and write decimal equivalents of hundredths. I can recognise and write decimal equivalents to ¼, ½ and ¾.	I can measure and calculate the perimeters of 2D shapes. I can find the areas of shapes by counting squares. I can draw a variety of different shapes using given perimeters and areas.	I can name a range of quadrilaterals including squares, rectangles, trapeziums, rhombuses and parallelograms. I can sort a range of quadrilaterals in a variety of ways based on their properties.	I can solve difference problems using information from bar charts, pictograms, tables and line graphs.
	I can read and write Roman numerals to 10. I can read and write Roman numerals to 100.	I can partition numbers and use number bonds to mentally add two four-digit numbers.	I can use a formal written method to multiply two-digit numbers by one-digit numbers.	I can round decimals with one decimal place to the nearest whole number. I can count up and down in hundredths.	I can write amounts of money shown in coins using £ and p. I can round amounts written in £ and p to the nearest pound and ten pounds.	I can describe movements between positions on grids using the language *left, right, up* and *down*. I can translate shapes on grids and draw their new positions.	I can use data shown on line graphs to predict future trends.
	I can round numbers with up to four digits to the nearest ten. I can round numbers with up to four digits to the nearest hundred.	I can use bar modelling to represent one-step addition and subtraction problems involving two four-digit numbers.	I can use a formal written method to calculate the division of two and three-digit numbers by one digit numbers.	I can divide whole numbers by 10 and identify the values of the digits in the answers. I can divide whole numbers by 100 and identify the values of the digits in the answers.	I can read and write times using the 24-hour clock. I can convert time durations from minutes to seconds, hours to minutes, years to months and weeks to days.	I can describe the positions of coordinates. I can plot coordinates on a grid.	I understand and can explain the differences between discrete and continuous data.
	I can round numbers with four digits to the nearest thousand.	I can use bar modelling to represent two-step addition and subtraction problems involving two four-digit numbers.	I can use bar modelling to represent scaling and division problems across a range of contexts.	I can compare numbers with up to two decimal places, mathematical language and < > = symbols.	I can use empty number lines to represent and calculate problems involving time.	I can complete shapes on a grid by plotting given points and identifying the positions of the remaining vertices.	I can choose the most appropriate chart to present discrete and continuous data on.

My Maths Learning Journey

	Numbers to 1,000,000	+ and -	x and ÷	Fractions, decimals and percentages	Measurement	Geometry	Statistics
Year 5	I can represent numbers to 1,000,000 using apparatus. I can read and write numbers to 1,000,000 in numerals and words.	I can add multiples of 1,000 (up to 100,000) to six-digit numbers mentally by counting on. I can subtract multiples of 1,000 (up to 100,000) from six-digit numbers mentally by counting back.	I can use known facts to calculate multiples of numbers. I can identify the factors of a range of two-digit numbers.	I can divide integers to create fractions, including mixed numbers. I can identify equivalent fractions using my multiplication knowledge.	I know the number of g in 1kg, ml in 1l, mm in 1cm, cm in 1m and m in 1km. I can write masses, volumes and lengths of objects as decimals.	I can identify acute, right, obtuse and reflex angles in shapes. I can use a protractor to measure angles.	I can interpret data presented in timetables. I can solve two-step problems using information presented in timetables.
	I can explain the value of any digit in six-digit numbers. I can use bar modelling and number lines to represent numbers up to 1,000,000 to compare them.	I can add and subtract two six-digit numbers using a formal written method where regrouping is required	I can identify common factors of a range of two-digit numbers. I can calculate square and cube numbers mentally.	I can use diagrams to compare and order fractions with different denominators. I can add and subtract fractions with different denominators. I can multiply mixed numbers by whole numbers.	I can convert between inches and cm. I can compare masses, volumes, lengths of objects and times of events written in different units of measurement through conversion.	I can draw angles of given sizes. I know how many degrees are on a straight line and about a point, and can use this information to calculate missing angles.	I can interpret data shown on line graphs with more than one line.
	I can compare and order numbers up to 1,000,000 using mathematical language and < > = symbols.	I can use my knowledge of rounding to estimate answers before calculating.	I can recognise and use the correct vocabulary to describe prime numbers, prime factors and composite numbers.	I can represent numbers with three decimal places using apparatus. I can recognise and write decimal equivalents of thousandths.	I can use empty number lines to represent and calculate problems involving time.	I can identify 3D shapes, including cubes and other cuboids, from 2D representations.	I can solve addition problems using information presented on line graphs with more than one line.
	I can apply my knowledge of place value to complete and create numbers patterns involving numbers up to 1,000,000.	I can use my knowledge of rounding to check the accuracy of answers after calculating.	I can use a formal written method to multiply four-digit numbers by one and two-digit numbers.	I can compare and order numbers with three decimal places using mathematical language and < > = symbols.	I can read and write temperatures in degrees celsius as both positive and negative numbers.	I can sort a range of polygons in a variety of ways based on their properties, including lengths, vertices and angles.	I can solve subtraction problems using information presented on line graphs with more than one line.
	I can round numbers with up to six digits to the nearest 10, 000. I can round numbers with up to six digits to the nearest 100, 000.	I can choose the most suitable method to complete addition and subtraction tasks and explain my reasons.	I can use a formal written method to calculate the division of four-digit numbers by one digit numbers, including those that will result in answers with remainders.	I can use a formal written method to add and subtract numbers with three decimal places. I can round numbers to the nearest decimal place (1dp).	I can measure and calculate perimeters of a range of polygons, including composite shapes.	I can explain the differences between and sort regular and irregular polygons.	I can make comparisons between different sets of data shown on the same line graph.
	I can read and write Roman numerals to 1000. I can read and write years using Roman numerals.	I can use bar modelling to represent multi-step addition and subtraction problems involving numbers with six digits across a range of contexts.	I can multiply and divide whole numbers by multiples of 10, 100 and 1000 and identify the value of the digits in the answers. I can use bar modelling to represent scaling and division problems across a range of contexts.	I can represent fractions as percentages using diagrams. I can represent fractions as percentages using my multiplication knowledge.	I can use the L x W formula to calculate the areas of rectangles. I can split rectilinear shapes into quadrilaterals to calculate their areas. I can use apparatus to estimate the volume and capacity of containers.	I can translate shapes on grids and draw their new positions.	I can use data shown in a line graphs to predict future trends.

My Maths Learning Journey

	Numbers to 10,000,000	+ and - x and ÷	Algebra	Ratio and proportion
Y e a r 6	I can represent numbers to 10,000,000 using apparatus. I can read and write numbers to 10,000,000 in numerals and words.	I can use bar modelling to represent and solve multi-step addition and subtraction problems involving numbers with seven digits across a range of contexts.	I can recognise and use simple formulae such as a+3, a-3 and 3a.	I can use apparatus and bar modelling to compare quantities.
	I can explain the value of any digit in seven-digit numbers. I can use bar modelling and number lines to represent numbers up to 10,000,000 to compare them.	I recognise and can use the correct order of operations to find values of expressions. I can manipulate digits and operations to create expressions which result in given answers.	I can describe complete patterns, such as linear number sequences, using simple formulae.	I can write sentences showing comparisons of objects or pictures (for example, for every 2 squares there are 3 circles).
	I can compare and order numbers up to 10,000,000 using mathematical language and < > = symbols.	I can use a formal written method to multiply numbers with five digits by two-digit numbers.	I can use diagrams and apparatus to continue given patterns, using algebraic expressions to describe these.	I can write comparisons of given quantities in the format 2:3. I can simplify given ratios using my multiplication knowledge.
	I can round numbers with seven digits to the nearest 10, 100, 1000, 10,000, 100,000 and million.	I can use the formal written method of short division to divide four-digit numbers by two-digit numbers, including those that will result in answers with remainders.	I can generate my own number sequences using given formulae.	I can compare quantities by showing them as fractions in their simplest form.
	I can represent negative numbers using empty number lines.	I can use the formal written method of long division to divide four-digit numbers by two-digit numbers, including those that will result in answers with remainders.	I can solve equations by using bar modelling to assign numerical values to unknown quantities in algebraic expressions.	I can assign values to unknown quantities represented in the 2:3 format, when given the total value.
	I can use empty number lines to add and subtract negative numbers to and from positive and negative numbers.	I can use bar modelling to represent multi-step scaling and division problems across a range of contexts.	I can apply problem-solving strategies to identify numerical values of more two or more unknown quantities in algebraic expressions.	I can investigate problems which including ratios written in the 2:3 format, using my multiplication knowledge.

My Maths Learning Journey

	Fractions, decimals and percentages	Measurement	Geometry	Statistics
Year 6	I can reduce fractions to their simplest form. I can compare and order fractions (including mixed numbers) with different denominators using mathematical language and < > = symbols.	I know the number of g in 1kg, ml in 1l, mm in 1cm, cm in 1m and m in 1km. I can write masses, volumes and lengths of objects as decimals (with up to three decimal places).	I can calculate the size of missing angles about a point, on a straight line and those that are vertically opposite in a range of 2D shapes.	I can use my multiplication and division knowledge to calculate means of amounts across a range of contexts.
	I can add and subtract fractions (including mixed numbers) with different denominators. I can use diagrams to multiply fractions with different denominators together.	I can compare masses, volumes, lengths of objects and times of events written in different units of measurement through conversion using mathematical language and < > = symbols.	I can use mathematical vocabulary including *diameter, radius* and *circumference* to describe parts of a circle. I can calculate the length of the diameter of a circle using the given value of the radius.	I can solve multi-step problems using information presented on line graphs with more than one line.
	I can use diagrams to divide fractions by whole numbers. I can represent numbers with three decimal places using apparatus.	I can use given areas and measurements to calculate the lengths of missing sides of rectangles.	I can calculate the length of a diameter of a circle using the given value of the diameter. I can draw a range of 2D shapes using given criteria such as lengths, angles and properties (e.g. parallel sides).	I can use data shown on line graphs to solve problems requiring conversion between different units of measurement.
	I can divide whole numbers by 10, 100 and 1000 and identify the values of the digits in the answers. I can recognise and write decimal equivalents of thousandths.	I can use the areas of rectangles to calculate the areas of a range of polygons.	I can identify a range of 3D shapes from 2D representations (nets). I can use concrete apparatus and drawings to show the nets of a range of 3D shapes.	I can use my existing mathematical knowledge (including angles, times tables, fractions and percentages) to interpret data shown on pie charts.
	I can multiply numbers with up to three decimal places by whole numbers using a formal written method. I can divide numbers with up to three decimal places by two-digit numbers.	I can calculate the areas of triangles using the formula a = ½ bh.	I can describe the positions of shapes on grids with four quadrants. I can complete shapes on grid with four quadrants by plotting given points and identifying the remaining vertices.	I can solve multi-step problems using information presented on pie charts.
	I can calculate percentages of amounts through division. I can calculate percentage changes to amounts.	I can calculate the volumes of cuboids using the formula l x w x h.	I can translate shapes on grids and draw their new positions on grids with four quadrants. I can reflect shapes across mirror lines and draw their new positions on grids with four quadrants.	I can construct pie charts to represent data.