Year 1 Maths Progression Chart

Number and place value	Addition & Subtraction	Multiplication & Division	Fractions	Measurement	Measurement cont…	Properties of Shape
(KPI) I can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number ,	I can read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs,	I can solve one-step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher,	(KPI) 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,	(KPI) I can begin to compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later],	(KPI) I can recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles],
(KPI) I can count, read and write numbers to 100 in numerals,	(KPI) I can represent and use number bonds and related subtraction facts within 20,	I can solve one-step problems involving division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity,	I can measure and begin to record lengths and heights(non-standard)	I can measure and begin to record time (hours, minutes, seconds).	(KPI) I can recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres],
(KPI) I can count in multiples of twos, fives and tens,	I can add and subtract one-digit and two-digit numbers to 20, including zero,		(KPI) I can compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half],	(KPI) I can compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than](non-standard),	(KPI) 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	
						Position and Direction
(KPI) I can identify one more and one less from a given number (0-100),	I can solve one-step problems that involve addition, using concrete objects and pictorial representations, and missing number problems such as 7 = + 4.			I can measure and begin to record mass/weight (non-standard),	I can recognise and use language relating to dates, including days of the week, weeks, months and years,	I can describe position, direction and movement, including whole, half, quarter and three-quarter turns
I can use the language of: equal to, more than, less than (fewer), most, least (0-100),	I can solve one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9.		(KPI) I can compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter],	I can sequence events in chronological order using correct language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening],	
I can identify and represent numbers using objects and pictorial representations including the number line,				I can measure and begin to record capacity and volume,		
I can read and write numbers from 1 to 20 in words				I can recognise and know the value of different denominations of coins and notes,		

Year 2 Maths Progression Chart

Number and place value	Addition & Subtraction	Multiplication & Division	Fractions	Measurement	Properties of Shape	Position and Direction
(KPI) I can count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward,	(KPI) I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100,	(KPI) 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 count in fractions up to 10, starting from any number and using the ½ and 2/4 equivalence on the number line,	I can choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); to the nearest appropriate unit, using ruler,	I can identify and describe the properties of 2-D shapes, including the number of sides,	I can order and arrange combinations of mathematical objects in patterns and sequences,
(KPI) I can compare and order numbers from 0 up to 100; use <, > and = signs,	I can add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens , two two-digit numbers , adding three one-digit numbers.	I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs,	(KPI) I can recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity,	I can compare and order lengths and record the results using >, < and =,	(KPI) I can compare and sort common 2-D shapes and everyday objects,	(KPI) I can use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise),
I can identify, represent and estimate numbers using different representations, including the number line,	I understand that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot,	I know that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot,	I can write simple fractions e.g. 1/2 of 6 = 3 and recognise the equivalence of 2/4 and ½,	I can choose and use appropriate standard units to estimate and measure mass (kg/g); scales.	I can identify and describe the properties of 2-D shapes, including line symmetry in a vertical line.	
I can read and write numbers to at least 100 in numerals and in words,	I can recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems,	(KPI) I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.		I can compare and order mass, and record the results using >, < and =,	I can identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces,	**Statistics** — I can interpret and present data using bar charts, pictograms and tables,
I recognise the place value of each digit in a two-digit number (tens, ones),	(KPI) I can solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures.		**Measurement cont…** — I can compare and order volume/capacity and record the results using >, < and =	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 can compare and sort common 3-D shapes and everyday objects,	(KPI) 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,
(KPI) I can use place value and number facts to solve problems.	(KPI) I can solve problems with addition and subtraction: • Applying with increasing knowledge of mental and written methods		I can recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	I can compare and sequence intervals of time,	I can identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].	
			I can find different combinations of coins that equal the same amounts of money,	I know the number of minutes in an hour and the number of hours in a day,		
		Measurement cont… — I can choose and use appropriate standard units to estimate and measure temperature (°C) to the nearest appropriate unit, using thermometers.	(KPI) I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change,	I can choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit using measuring vessels.		

Year 3 Maths Progression Chart

Number and place value	Addition & Subtraction	Multiplication & Division	Fractions	Measurement	Properties of Shape	Statistics
(KPI) I can count from 0 in multiples of 4, 8, 50 and 100,	(KPI) I can add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds.	I can estimate the answer to a multiplication/division calculation and use inverse operations to check answers,	(KPI) I can count up and down in tenths,	I can read a partially numbered scale to the nearest marked division,	I can recognise angles as a property of shape or a description of a turn,	I can solve one-step and two-step questions,
(KPI) I can find 10 or 100 more or less than a given number,	I can add and subtract numbers with up to three digits, using suitable methods that lead to vertical methods of addition and subtraction.	(KPI) I can recall and use multiplication and division facts for the 2, 3, 4, 5, 8 and 10 multiplication tables. I can solve missing number problems for multiplication,	(KPI) I understand that tenths arise from dividing an object or number into 10 equal parts,	(KPI) I can accurately measure, compare, add and subtract lengths (m/cm/mm),	(KPI) I can identify right angles,	(KPI) I can interpret and present data using bar charts, pictograms and tables,
I can compare and order numbers up to 1 000,	I can estimate the answer to an addition/subtraction calculation and use inverse operations to check answers,	(KPI) I can write and calculate number sentences for multiplication and division.	I can find and write fractions of a discrete set of objects,	I can measure the perimeter of simple 2-D shapes,	(KPI) I can identify whether angles are greater than or less than a right angle,	
I can identify, represent and estimate numbers using different representations,		I can use facts that I know to work out other facts and explain how I did it,	(KPI) I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators,	(KPI) I can measure, compare, add and subtract mass (kg/g),	(KPI) I can recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn,	**Measurement cont...** I can estimate and read time with increasing accuracy to the nearest minute, I can record and compare time in terms of seconds, minutes and hours,
I can read and write numbers up to 1 000 in numerals and in words,		I can use multiplication and division to scale up or down,	(KPI) I can recognise and show, using diagrams, equivalent fractions with small denominators,	(KPI) I can measure, compare, add and subtract volume/capacity (l/ml),	I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines,	I can use vocabulary such as o'clock, a.m./p.m., 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,
(KPI) I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones).			I can add and subtract fractions with the same denominator within one whole,	(KPI) I can add and subtract amounts of money to give change, using both £ and p in practical contexts,		I can compare durations of events [for example to calculate the time taken by particular events or tasks],
		Fractions cont... I can solve problems involving all of the above,	I can compare and order unit fractions, and fractions with the same denominator,	(KPI) 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 solve number problems and practical problems involving these ideas,

Year 4 - Maths Progression Chart

Number and place value	Addition & Subtraction	Multiplication & Division	Fractions	Measurement	Properties of Shape	Position & Direction
(KPI) I can count backwards through zero to include negative numbers,	I can add and subtract numbers with up to 4 digits using suitable methods that lead to vertical methods of addition and subtraction.	I can multiply two-digit and three-digit numbers by a one-digit number using suitable methods that lead to vertical methods of multiplication and division.	(KPI) I can count up and down in hundredths,	I can measure and calculate the perimeter of a rectangle (including squares) in centimetres and metres,	(KPI) I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes,	I can describe positions on a 2-D grid as coordinates in the first quadrant,
(KPI) I can count in multiples of 6, 7, 9, 25 and 1000,	(KPI) I can solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why,	(KPI) I can recall multiplication and division facts for all multiplication tables up to 12 × 12,	(KPI) I recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten,	I can find the area of rectangles by counting squares,	I can identify acute and obtuse angles and compare and order angles up to two right angles by size,	(KPI) I can plot specified points and draw sides to complete a given polygon,
I can find 1000 more or less than a given number,		I can use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.	I can compare and order numbers with the same number of decimal places up to two decimal places,	I can estimate, compare and calculate different measures, including money in pounds and pence,	(KPI) I can identify lines of symmetry in 2-D shapes presented in different orientations,	I can describe movements between positions as translations of a given unit to the left/right and up/down,
(KPI) I can order and compare numbers beyond 1000,		I can recognise and use factor pairs and commutativity in mental calculations,	I know the effect of dividing a one- or two-digit number by 10 and 100. I can identify the value of the digits in the answer as ones, tenths and hundredths,	(KPI) I can convert between different units of measure [for example, kilometre to metre],	I can complete a simple symmetric figure with respect to a specific line of symmetry,	
I can identify, represent and estimate numbers using different representations,		I can solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence	(KPI) I can round decimals with one decimal place to the nearest whole number,	I can read, write and convert time between analogue and digital 12- and 24-hour clocks ,		
I can read Roman numerals to 100 (C) and know that over time, the numeral system changed to include the concept of zero and place value,		I can estimate and use inverse operations to check answers to a calculation,	I can recognise and write decimal equivalents of any number of tenths or hundredths,	I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days,		**Statistics**
I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones),			(KPI) I can recognise and show, using diagrams, families of common equivalent fractions,			I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs,
				Fractions cont…		
(KPI) I can round any number to the nearest 10, 100 or 1000,			I can add and subtract fractions with the same denominator,	(KPI) I can solve simple measure and money problems involving fractions and decimals to two decimal places,		(KPI) I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs,
I can solve number and practical problems that involve all of the above and with increasingly large positive numbers,			I can solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number,	I can recognise and write decimal equivalents to ¼, ½, 3 /4, tenths,		

Year 5 - Maths Progression Charts

Number and place value	Addition & Subtraction	Multiplication & Division	Fractions	Measurement	Properties of Shape	Position & Direction
(KPI) I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero,	(KPI) I can add and subtract numbers mentally with increasingly large numbers,	I can recall multiplication and division facts for all multiplication tables up to 12 × 12,	I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents,	(KPI) I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.	I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations,	I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed,
I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000,	(KPI) I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction),	I can multiply numbers up to 4 digits by a one digit number using a formal written method.	(KPI) I can read, write, order and compare numbers with up to three decimal places,	(KPI) I can calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes,	(KPI) I know angles are measured in degrees. I can draw given angles and measure them in degrees (o).	
(KPI) I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit,	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	I can multiply numbers up to 4 digits by a two-digit number using a formal written method, including long multiplication.	I can round decimals with two decimal places to the nearest whole number and to one decimal place,	I can estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water],	I can identify: • angles at a point and one whole turn (total 360o) • angles at a point on a straight line and ½ a turn (total 180o)	
I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals,		I can divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.(	(KPI) I can compare and order fractions whose denominators are all multiples of the same number,	I can solve problems involving converting between units of time,	I can estimate and compare acute, obtuse and reflex angles,	
I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000,		I can multiply and divide numbers mentally drawing upon known facts,	I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths,	(KPI) I can convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre),	I can use the properties of rectangles to deduce related facts and find missing lengths and angles,	
I can solve number problems and practical problems that involve all of the above,		I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000,	(KPI) I can read and write decimal numbers as fractions (e.g. 0.71 = 71/100),	I can understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints,	I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles,	
I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.		(KPI) I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers,	I can recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred",	I can use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling,		
I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy,		I can recognise and use square numbers and cube numbers, and the notation for squared and cubed,	I can write percentages as a fraction with denominator 100 as a decimal fraction,			
		I know and can use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	I can add and subtract fractions with the same denominator and multiples of the same number,			
		I can establish whether a number up to 100 is prime and recall prime numbers up to 19,	I can recognise mixed numbers and improper fractions and convert from one form to the other,			

			Fractions cont…			**Statistics**
		(KPI) I can solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes	I can write mathematical statements > 1 as a mixed number (e.g. 2/5 + 4/5 = 6/5 = 11/5),	I can solve problems involving numbers up to three decimal places,		(KPI) I can complete, read and interpret information in tables, including timetables,
		(KPI) I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates,	I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams,	(KPI) I can solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25,		I can solve comparison, sum and difference problems using information presented in a line graph,

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Number and place value	Addition & Subtraction	Multiplication & Division	Fractions	Fractions Cont…	Measurement	Properties of Shape
(KPI) I can use negative numbers in context, and calculate intervals across zero,	I can perform mental calculations, including with mixed operations and large numbers,	I can recall and use multiplication and division facts for all multiplication tables up to 12x12.	I can compare and order fractions, including fractions >1	(KPI) I can solve problems which require answers to be rounded to specified degrees of accuracy,	I can recognise that shapes with the same areas can have different perimeters and vice versa,	I can draw 2-D shapes using given dimensions and angles,
I can read, write, order and compare numbers up to 10 000 000,	(KPI) I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why,	(KPI) 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 use common factors to simplify fractions; use common multiples to express fractions in the same denomination,		I can recognise when it is possible to use formulae for area of shapes	I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
I can use place value in numbers up to 10 000 000 ,	I can add and subtract whole numbers with more than 4 digits, using formal written methods where appropriate,	(KPI) I can divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division where appropriate for the context,	I can associate a fraction with division and calculate decimal fraction equivalents for a simple fraction (e.g. 0.375 = 3/8),	**Ratio and Proportion** I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts,	I can calculate the area of parallelograms, triangles and compound shapes,	I can recognise, describe and build simple 3-D shapes, including making nets,
(KPI) I can round any whole number to a required degree of accuracy,		(KPI) 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, decimals or by rounding, as appropriate for the context.	(KPI) I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts,	I can solve problems involving similar shapes where the scale factor is known or can be found,	I can calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3),	I can recognise angles where they meet at a point, are on a straight line, in a triangle or are vertically opposite, and find missing angles,
I can solve number and practical problems that involve all of the above.		I can identify and use common factors, common multiples, square numbers and prime numbers,	I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions,	I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples,	I can recognise when it is possible to use formulae for volume of shapes,	(KPI) 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 use their knowledge of the order of operations to carry out calculations involving the four operations,	I can multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1/4 × 1/2 = 1/8),		(KPI) I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate,	
I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.		(KPI) I can use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy,	I can divide proper fractions by whole numbers (e.g. 1/3 ÷ 2 = 1/6),		I can read, write and convert time between analogue and digital clocks. (Including use of Roman numerals).	
I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy,		I can solve problems involving addition, subtraction, multiplication and division,	I can find simple fractions and percentages of whole numbers and quantities,	**Algebra** I can express missing number problems algebraically,	I can calculate duration of events,	**Position and Direction** I can describe positions on the full coordinate grid (all four quadrants),
			I can solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison,	I can find pairs of numbers that satisfy number sentences involving two unknowns,		(KPI) I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes,
			I can multiply one-digit numbers with up to two decimal places by whole numbers,	I can enumerate all possibilities of combinations of two variables,		**Statistics**
			I can identify the value of each digit to three decimal places,	(KPI) I can use simple formulae and recognise when it is possible to use formulae for area and volume of shapes,		(KPI) I can interpret and construct pie charts, bar charts and line graphs and use these to solve problems,
			I can multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places,	I can generate and describe linear number sequences,		(KPI) I can calculate and interpret the mean as an average,