

Mathematics



Name _____

Class _____

Standard 1

		Addition and Subtraction	Evidence date		
C	1.	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.			
C	2.	Represent and use number bonds and related subtraction facts within 10.			
C	3.	Add and subtract one-digit and two-digit numbers to 20, including zero			
C	4.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$.			
		Multiplication and Division			
C	5.	Solve one step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with support from the teacher.			
		Place Value			
C	6.	Count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number.			
C	7.	Count, read and write numbers to 100 in numerals, count in multiples of twos, fives and tens.			
C	8.	Given a number, identify one more and one less.			
C	9.	Identify and represent numbers using objects and pictorial representations including the number line, and use language of: equal to, more than, less than, most, least.			
C	10.	Read and write numbers from 1 to 20 in numerals and words.			
		Fractions			
C	11.	Recognise, find and name a half as 1 of 2 parts of an object, shape or quantity			
C	12.	Recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity.			
		Measurement			
M	13.	Compare, describe and solve practical problems for lengths and heights (for example long/short, longer/shorter)			
M	14.	Measure and begin to record lengths and heights, mass/weight, capacity and volume.			
M	15.	Recognise and know the value of different denominations of coins and notes			
M	16.	Sequence events in chronological order, using language (for example before and after, next, first, today, tomorrow)			
M	17.	Recognise and use language related to dates, including days of the week, weeks, months and years.			
M	18.	Tell the time to the hour and half past the hour and draw hands on a clock face to show these times.			
		Position and Direction			
S	19.	Describe position, direction and movement including whole, half, quarter and three quarter turns.			
		Properties of shapes			
S	20.	Recognise and name common 2D shapes including squares, rectangles, circles and triangles.			
S	21.	Recognise and name common 3D shapes including cubes, cuboids, pyramids and spheres			
		Properties of Shapes			
S	22.	Recognise and name common 2D shapes (for example, rectangles (including squares), circles and triangles)).			
S	23.	Recognise and name common 3D shapes (for example, cuboids () including cubes), pyramids and spheres).			

Standard 2

		Addition and Subtraction	Evidence date		
C	1	Add and subtract numbers mentally.			
C	2	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.			
C	3	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.			
C	4	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.			
C	5	Solve problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods.			
		Multiplication and Division			
C	6	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.			
C	7	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs.			
C	8	Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.			
C	9	Solve problems involving multiplication and division, using materials, arrays and repeated addition, mental methods, and multiplication and division facts, including problems in contexts.			
		Place Value			
C	10	Count in steps of 2,3 and 5 from 0, and in tens from any number, forward and backward.			
C	11	Recognise the place value of each digit in a two-digit number.			
C	12	Compare and order numbers up to 100, use < > and = signs.			
C	13	Read and write numbers to at least 100 in numerals and words.			
C	14	Use place value and number facts to solve problems.			
		Fractions			
C	15	Recognise, find, name and write fractions third, quarter, two quarters and three quarters of a length, shape, set of objects or quantity.			
C	16	Write simple fractions for example, half of 6 = 3 and recognise the equivalence of 2 quarters and a half.			
		Measurement			
M	17	Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.			
M	18	Compare and order lengths, mass, volume/capacity and record the results using <, > and =			
M	19	Recognise and use symbols for pounds (£) and pence (p), combine amounts to make a particular value.			
M	20	Find different combinations of coins that equal the same value of money.			
M	21	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.			
M	22	Compare and sequence intervals of time			
M	23	Tell and write the time to 5 minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.			
M	24	Know the number of minutes in an hour and the number of hours in a day.			

		Position and direction			
S	25	Order and arrange combinations of mathematical objects in patterns and sequences.			
S	26	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 anticlockwise)			
		Properties of Shapes			
S	27	Identify and describe the properties of 2D shapes, including the number of sides and lines of symmetry.			
S	28	Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.			
S	29	Identify 2D shapes on the surface of 3D shapes.			
S	30	Compare and sort common 2D and 3D shapes and everyday objects.			
		Statistics			
S	31	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.			
S	32	Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.			
S	33	Ask and answer questions about totaling and comparing categorical data.			

Standard 3

		Addition and Subtraction	Evidence date		
C	1	Add and subtract numbers mentally.			
C	2	Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.			
C	3	Estimate the answer to a calculation and use inverse operation to check answers.			
C	4	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.			
		Multiplication and Division			
C	5	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.			
C	6	Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2 digit numbers times one digit numbers, using mental and progressing to formal written methods.			
C	7	Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.			
		Place Value			
C	8	Count from 0 in multiples of 4,8, 50 and 100, find 10 or 100 more or less than a given number.			
C	9	Recognise the place value of each digit in a three-digit number.			
C	10	Compare and order numbers up to 1000.			
C	11	Identify, represent and estimate numbers using different representations.			
C	12	Read and write numbers up to 1000, in numerals and in words.			
C	13	Solve number problems and practical problems involving these ideas.			
		Fractions			
C	14	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.			
C	15	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.			
C	16	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.			
C	17	Recognise and show, using diagrams, equivalent fractions with small denominators.			
C	18	Add and subtract fractions with the same denominator within one whole.			
C	19	Compare and order unit fractions, and fractions with the same denominators.			
C	20	Solve problems that involve all of the above.			
		Measurement			
M	21	Measure, compare, add and subtract: lengths (m/cm/mm), mass (kg,g), volume/capacity(l,ml)			
M	22	Measure the perimeter of simple 2D shapes.			
M	23	Add and subtract amounts of money to give change, using both £ and p in practical contexts.			
M	24	Tell and write the time from an analogue clock, including using numerals 1 to xii, and 12 and 24 hour clocks.			
M	25	Estimate and read time with increasing accuracy to the nearest minute, record and compare time in terms of seconds, minutes,			

		hours; use vocabulary such as o'clock, am and pm, morning, afternoon, noon and midnight.			
M	26	Know the number of seconds in a minute and the number of days in each month, year and leap year.			
M	27	Compare durations of events.			
		Properties of Shapes			
S	28	Draw 2D shapes, recognise 3D shapes in different orientations and describe them.			
S	29	Recognise angles as a property of a shape or description of a turn.			
S	30	Identify right angles; identify whether angles are greater than or less than a right angle.			
S	31	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.			
		Statistics			
D	32	Interpret and present data using bar charts, pictograms and tables. Solve one step and two step questions (for example, 'How many more?' and 'How many fewer?' using information presented in scaled bar charts, pictograms and tables.			

Standard 4

		Addition and Subtraction	Evidence date		
C	1	Add numbers up to 4 digits, using formal written methods of columnar addition and subtraction.			
C	2	Estimate and answer a calculation and use inverse operations to check answers.			
C	3	Solve addition and subtraction two step problems in context, decide which operations and methods to use and why.			
		Multiplication and Division			
C	4	Recall multiplication and division up to 12x12			
C	5	Use place value, known and derived facts to multiply and divide mentally, including: dividing by 1; multiplying together three numbers.			
C	6	Recognise and use factor pairs and commutatively in mental calculations.			
C	7	Multiply 2 digit and 3 digit numbers by a 1 digit number using formal written layout.			
C	8	Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.			
		Place Value			
C	9	Count in multiples of 6,7,9,25 and 1000.			
C	10	Find 1000 more or less than a given number.			
C	11	Count backwards through zero to include negative numbers.			
C	12	Recognise the place value of each digit in a 4 digit number.			
C	13	Order and compare numbers beyond 1000.			
C	14	Identify, represent and estimate numbers using different representations.			
C	15	Read and write numbers up to 1000 in numerals and words.			
C	16	Round any number to the nearest 10, 100 or 1000.			
C	17	Solve number and practical problems that involve all of the above and with increasingly large positive numbers.			
		Fractions			
C	18	Recognise and show, using diagrams, families of common equivalent fractions.			
C	19	Count up and down in hundredths.			
C	20	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.			
C	21	Add and subtract fractions with the same denominator.			
C	22	Recognise and write decimal equivalents of any number of tenths and hundredths.			
C	23	Recognise and write decimal equivalents to quarter, half and three quarters.			
C	24	Find the effect of dividing a one or two digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.			

C	25	Round decimals with 1 decimal place to the nearest whole number.			
C	26	Compare numbers with the same number of decimal places up to 2 decimal places.			
C	27	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.			
		Measurement			
M	28	Convert between different units of measure (for example, kilometre to metre, hour to minute).			
M	29	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.			
M	30	Estimate, compare and calculate different measures, including money in pounds and pence.			
M	31	Read, write and convert time between analogue and digital 12 and 24 hour clocks.			
M	32	Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days.			
		Position and Direction			
S	33	Describe positions on a 2D grid as co-ordinates in the first quadrant.			
S	34	Describe movements between positions as translations of a given unit to the left/right and up/down			
		Properties of Shapes			
S	35	Compose and classify geometric shapes, based on their properties and sizes (including triangles and quadrilaterals).			
S	36	Identify acute and obtuse angles and compare and order angles.			
S	37	Identify lines of symmetry in 2D shapes presented in different orientations.			
S	38	Complete a simple symmetrical figure with respect to a specific line of symmetry.			
		Statistics			
D	39	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.			
D	40	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.			

Standard 5

		Addition and Subtraction	Evidence date		
C	1	Add and subtract numbers mentally with increasingly large numbers.			
C	2	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)			
C	3	Use rounding to check answers and calculations and determine, in the context of a problem, levels of accuracy.			
C	4	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.			
		Multiplication and Division			
C	5	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.			
C	6	Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19.			
C	7	Multiply 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.			
C	8	Multiply and divide numbers mentally drawing upon known facts.			
C	9	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.			
C	10	Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000			
C	11	Recognise and use square numbers and cube numbers, and the notation for squared and cubed.			
		Place Value			
C	12	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.			
C	13	Count forward or backward in steps of powers of ten for any given number up to 1,000,000			
C	14	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.			
C	15	Round any number up to 1,000,000 to the nearest 10,100,1000, 10,000, and 100,000.			
C	16	Solve number problems and practical problems.			
C	17	Read Roman numerals to 1000 and recognise years written in Roman numerals.			
		Fractions			
C	18	Compare and order fractions whose denominators are all multiples of the same number.			
C	19	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.			
C	20	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.			
C	21	Add and subtract fractions with the same denominator, and denominators that are multiples of the same number.			
C	22	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.			
C	23	Read and write decimal numbers as fractions (for example 0.71 as 71 hundredths).			
C	24	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.			
C	25	Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place.			
C	26	Read, write, order and compare numbers with up to 3 decimal places.			

C	27	Solve problems involving numbers up to 3 decimal places.			
C	28	Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator, and as a decimal fraction.			
C	29	Solve problems which require knowing percentage and decimal equivalents of half, quarter, fifth, two fifths, four fifths and those fractions with a denominator of a multiple of 10 or 25.			
		Measurement			
M	30	Convert between different units of metric measure (for example kilometre and metre; centimetre and metre; centimetre and millimetre, gram and kilogram; litre and millilitre).			
M	31	Understand and use appropriate equivalences between metric units and common imperial units such as inches, pounds and pints.			
M	32	Measure and calculate the perimeter of composite rectilinear shapes in metres and centimetres.			
M	33	Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres and square metres and estimate the area of irregular shapes.			
M	34	Estimate volume (for example, using 1 cm cubed blocks to build cuboids (including cubes) and capacity (for example using water).			
M	35	Solve problems involving converting between units of time.			
M	36	Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.			
		Properties of Shapes			
S	37	Identify 3D shapes, including cubes and other cuboids from 2D representations.			
S	38	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.			
S	39	Draw given angles, and measure them in degrees.			
S	40	Identify angles at a point and one whole turn; angles at a point on a straight line and a turn; other multiples of 90 degrees.			
S	41	Use the properties of rectangles to deduce related facts and find missing lengths and angles.			
S	42	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.			
S	43	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.			
		Statistics			
D	44	Solve comparison, sum and difference problems using information presented in a line graph.			
D	45	Complete, read and interpret information in tables, including timetables.			

Standard 6

		Addition and Subtraction	Evidence date		
C	1	Perform mental calculations, including with mixed operations and large numbers.			
C	2	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.			
C	3	Use knowledge of the order of operations to carry out calculations involving the four operations.			
C	4	Solve problems involving addition, subtraction, multiplication and division			
C	5	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.			
		Place Value			
C	6	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.			
C	7	Round any whole number to a required degree of accuracy.			
C	8	Use negative numbers in context, and calculate intervals across zero.			
C	9	Solve number and practical problems.			
		Fractions			
C	10	Use common factors to simplify fractions			
C	11	Compare and order fractions, including fractions > 1 .			
C	12	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.			
C	13	Multiply simple pairs of proper fractions, writing the answer in its simplest form.			
C	14	Divide proper fractions by whole numbers.			
		Algebra			
C	15	Use simple formulae			
C	16	Generate and describe linear number sequences.			
C	17	Express missing number problems algebraically.			
C	18	Find pairs of numbers that satisfy an equation with two unknowns.			
C	19	Enumerate possibilities of combinations of two variables.			
		Ratio and Proportion			
C	20	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.			
C	21	Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.			
C	22	Solve problems involving similar shapes where the scale factor is known or can be found.			
C	23	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.			
		Measurement			
M	24	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.			
M	25	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.			
M	26	Convert between miles and kilometres.			
M	27	Recognise that shapes with the same areas can have different perimeters and vice versa.			
M	28	Recognise when it is possible to use formulae for area and volume of shapes.			

M	29	Calculate the area of parallelograms and triangles.			
M	30	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres and cubic metres, and extending to other units (for example cubic millimetres).			
		Position and Direction			
S	31	Describe positions on the full coordinate grid (all four quadrants).			
S	32	Draw and translate simple shapes on a coordinate plane, and reflect them in the axis.			
		Properties of Shapes			
S	33	Draw 2D shapes using given dimensions and angles.			
S	34	Recognise, describe and build simple 3D shapes, including making nets.			
		Statistics			
D	35	Interpret and construct pie charts and line graphs and use these to solve problems.			
D	36	Calculate and interpret the mean as the average.			