RCFS Maths Progression of Skills

Strand	Reception	Year 1	Year 2	Year 3	Year 4
Number and Place Value		*I can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. *I can count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. *I can identify one more and one less of numbers up to 100. *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 1-20 in numerals and words.	I can count in steps of 2, 3, 5 and 0, and in tens from any number, forward and backward. *I can recognise the place value of each digit in a two-digit number (tens, ones). *I can identify, represent and estimate numbers using different representations, including the 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 words. *I can use place value and number facts to solve problems.	*I can count from 0 in multiples of 4,8,50 and 100; find 10 or 100 more or less than a given number. *I can recognise the place value of each digit in a three-digit number (hundreds, tens and ones). *I can compare and order numbers up to 1000. *I can identify, represent and estimate numbers using different representations. *I can read and write numbers up to 1000 in numerals and in words. *I can solve number problems and practical problems involving these ideas.	*I can count in multiples of 6, 7,9,25 and 1000. *I can find 1000 more or less than a given number. *I can count backwards through zero to include negative numbers. *I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). *I can order and compare numbers beyond 1000. *I can identify, represent and estimate numbers using different representations. *I can round any number to the nearest 10,100 and 1000. *I can solve number and practical problems that involve all of the above and with increasingly large positive numbers. *I can read Roman numerals to 100 (I to C)

RCFS Maths Progression of Skills

					and know that over time, the numeral system changed to include the concept of zero and place value.
Addition and Subtraction		*I can read, write and interpret mathematical symbols involving addition, subtraction and equal signs. *I can represent and use number bonds and related subtraction facts within 20. *I can add and subtract one-digit and two-digit numbers to 20, including zero. *I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.	*I can use concrete objects and pictorial representations, including those involving numbers, quantities and measures. *I can apply my increasing knowledge of mental and written methods. *I can recall using addition and subtraction facts to 20 fluently, and deriving and using related facts to 100. *I can show that addition of two number can be done in any order (commutative) and subtraction of one number from another cannot.	*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 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 facts, place value, and more complex addition and subtraction.	*I can add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. *I can estimate and use inverse operations to check answers to a calculation. *I can solve addition and subtraction two-step problems in context, deciding which operations and methods to use and why.
Multiplication and Division		*I can solve one-step problems including multiplication and division, by calculating the answer using concrete objects, pictorial	*I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	*I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. *I can write and calculate	*I can recall multiplication and division facts for multiplication tables up to 12 x 12. *I can use place value, known and derived

RCFS Maths Progression of Skills

		representations and arrays with support of the teacher.	*I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs. *I can show that multiplication for two numbers can be done in any order (commutative) and division of one number from another cannot. *I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit x 1-digit numbers, using mental methods and progressing to formal written methods. *I can solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems.	facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers. *I can recognise and use factor pairs and commutativity in mental calculations. *I can multiply two-digit and three-digit numbers by one-digit number using formal written layout. *I can solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems.
Fractions		*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.	*I can recognise, find, name and write fractions 1 3 1 4 2 4 3 4 of a length, shape, set of objects or quantity. *I can write simple fractions for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2.	*I can count up and down in tenths, recognise that tenths arise from dividing an object in to 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:	I can recognise and show, using diagrams, families of common equivalent fractions. I can round up and down in hundredths/recognise that hundredths arise when dividing an object by one hundred and dividing tenths by

RCFS Maths Progression of Skills

				unit fractions and non-unit fractions with small denominators. *I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. *I can recognise and show, using diagrams, equivalent fractions with small denominators. *I can add and subtract fractions with the same denominator within one whole (5/7 + 1/7 = 6/7). *I can compare and order unit fractions, and fractions with the same denominators. *I can solve problems that involve all of the above.	10. 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 add and subtract fractions with the same denominator. I can recognise and write decimal equivalents of any number of tenth or hundredths. I can recognise and write decimal equivalents to ¼, ¾, ½. *I can find the effect of dividing a one or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. *I can round decimals with one decimal place to the nearest whole number. *I can compare numbers with the same number of decimal

RCFS Maths Progression of Skills

					places up to two decimal places. *I can solve simple measure and money problems involving fractions and decimals to two decimal places.
Measurement	*I can begin to use language related to weight, length and capacity. *I can begin to record using marks that I can explain. *I can being to use language relating to time. *I can begin to use everyday language relating to money.	***I can compare, describe and solve practical problems for:*** *Length and Heights (long, short) (shorter/longer) *Weight and mass (heavy/light) (heavier than, lighter than) *Given a number, identify one more or one less *Capacity and volume (full, empty) (more than, less than) *Time(quicker, earlier, slower, later) ***I can measure and begin to record the following:*** *Lengths and heights *Mass/weight *Capacity and volume. *Time (hours, minutes, seconds). *Recognise and know the value of different denominations of coins and notes. *Sequence events in chronological order	*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 (ml/litres) 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) and combine amounts to make a particular value. *I can find different combinations of coins that equal the same amounts of money. *I can solve simple problems in a practical	*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, a.m,	*I can convert between different units of measure (kilometre to metre; hour to minute). *I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. *I can find the area of rectilinear shapes by counting squares. *I can estimate, compare and calculate different measures, including money in pounds and pence. *I can read, write and convert time between analogue and digital 12- and 24-hour clocks. *I can solve problems, involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

RCFS Maths Progression of Skills

		using language (before, after, next, first, today, yesterday). *Recognise and use language relating to dates, including days of the week, weeks, months and year. *Tell the time to the hour and to half past the hour and draw the hands on the clock to show these times.	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.	p.m, morning, afternoon, noon and midnight. *I can know the number of seconds in a minute and the number of days in each month, year and leap year. *I can compare durations of events (calculate time taken to a certain event).	
Geometry: Properties of Shapes	*I can begin to identify common 2D shapes. *I can begin to describe the properties of 2D shapes. *I can begin to identify common 3D shapes. *I can begin to describe the properties of 3D shapes.	*I can recognise and name rectangles (including squares), triangles and circles. *I can recognise and name cuboids (including cubes), pyramids and spheres.	*I can identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. *I can identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. *I can identify 2D shapes on the surface of 3D shapes (a circle on a cylinder and a triangle on a pyramid). *I can compare and sort common 2D and 3D shapes and everyday objects.	*I can draw 2-D shapes and make 3-D shapes using modelling materials 'recognise 3-D shapes in different orientations and describe them. *I can recognise angles as a property of shape or a description of a turn. *I can identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four make a complete turn; identify whether angles are greater than or less than a right angle.	*I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. *I can identify acute and obtuse angles and compare and order angles up to two right angles by size. *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.

RCFS Maths Progression of Skills

				*I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	
Geometry: Position and Direction	I can recreate a simple pattern. *I can use positional language.	*I can describe position direction and movement, including whole, half, quarter and three-quarter turns.	*I can order and arrange combinations of mathematical objects in patterns and sequences. *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 describe positions on a 2D grid as co-ordinates in the first quadrant. *I can describe movements between positions as translations of a given unit to the left/right and up/down. *I can plot specified points and draw sides to complete a given polygon.
Statistics			*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	*I can interpret and present data using bar charts, pictograms and tables *I can solve one-step and two-step questions (How many more?) (How many fewer?)using information presented in scaled bar charts and pictograms and tables .	*I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. *I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

RCFS Maths Progression of Skills

			totalling and comparing categorical data.		