Emmbrook Infant School EYFS and KS1 Maths Termly Overview

	Autumn	Spring Including Maths Core Review	Summer
FS2	**Number** • Take part in finger and number rhymes • Develop fast recognition of up to 3 objects without having to count individually • Show finger numbers up to 10 • Recognise numerals to 10 • Write numerals 0-10 • Link numerals and amounts • Compare numbers using language 'fewer then' and 'more than	**Number** • Explore composition of numbers to 10 • Have a deep understanding of number to 5 • Automatically recall bonds to 5 and some number bonds to 10 • Subitise (recognise quantities without counting) up to 5 • Recognise numerals to 10 • Write numerals 0-10	**Number** • Have a deep understanding of number to 10, including the composition of each number; • Subitise (recognise quantities without counting) up to 5; • Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
	Numerical Patterns • Count in every day context • Count beyond 10 • Count objects, actions, sounds • Know that last number reached is total (cardinal principle) • Link the numeral with its cardinal value • Order 0-10 • Begin to sequence a set of events • Understand one more/one less than • Create simple repeating patterns ABAB • Solve real world problems to 5	**Numerical Patterns** • Verbally count beyond 20, recognising the pattern of the counting system • Order 0-20 • To create and extend repeating patternsAABB **Geometry -properties of shapes** • Explore 2D and 3D shapes • Compose and decompose shapes • Use informal and mathematical language to describe 2D and 3D shapes: 'sides, 'corners', 'straight', 'flat', 'round' etc. **Geometry- position and direction** • Understand and use positional language	**Numerical Patterns** • Verbally count beyond 20, recognising the pattern of the counting system; • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally
	Measurement • Make comparisons with weight, length and capacity	**Measurement** • Compare weight, length, capacity	
Core values	Independence Resilience Teamwork Curiosity Patience	Independence Resilience Teamwork Curiosity Patience	Independence Resilience Teamwork Curiosity Patience

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

	Confidence	Confidence	Confidence
Year 1	**Autumn**	**Spring** **Including Maths Core Review**	**Summer**
	Number abnd Place value • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens • given a number, identify one more and one less 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, least • read and write numbers from 1 to 20 in numerals and words.	**Number abnd Place value** • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens • given a number, identify one more and one less 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, least • read and write numbers from 1 to 20 in numerals and words.	**Number abnd Place value** • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens • given a number, identify one more and one less 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, least • read and write numbers from 1 to 20 in numerals and words.
	Number- addition and subtraction • read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including zero • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 + = –9.	**Number- addition and subtraction** • read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including zero • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 + = –9.	**Number- addition and subtraction** • read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including zero • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 + = 9.

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

		Multiplication and Division • practical activities- lots of.. • Finding groups of… • Arrays- in the environment and then creating their own • Practical acivities- sharing into groups • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	**Multiplication and Division** • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
		Fractions • recognise, find and name a half as one of two equal parts of an object, shape or quantity • recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	**Fractions** • recognise, find and name a half as one of two equal parts of an object, shape or quantity • recognise, find and name a quarter as one of four equal parts of an object, shape or quantity
	Measurement • sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years • Language of measurement	**Measurement** • compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] mass/weight [for example, heavy/light, heavier than, lighter than] capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] time [for example, quicker, slower, earlier, later] • measure and begin to record the following: lengths and heights mass/weight capacity and volume	**Measurement** • compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] mass/weight [for example, heavy/light, heavier than, lighter than] capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] time [for example, quicker, slower, earlier, later] • measure and begin to record the following: lengths and heights mass/weight capacity and volume

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

		time (hours, minutes, seconds) • recognise and know the value of different denominations of coins and notes • sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. • compare and sequence intervals of time • know the number of minutes in an hour and the number of hours in a day	time (hours, minutes, seconds) • recognise and know the value of different denominations of coins and notes • sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. • compare and sequence intervals of time • know the number of minutes in an hour and the number of hours in a day
		Geometry -properties of shapes recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	**Geometry -properties of shapes** recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].
		Geometry- position and direction • describe position, direction and movement, including whole, half, quarter and threequarter turns. • order and arrange combinations of mathematical objects in patterns and sequences	**Geometry- position and direction** • describe position, direction and movement, including whole, half, quarter and threequarter turns. • order and arrange combinations of mathematical objects in patterns and sequences
Core Values	Independence Resilience Teamwork	Independence Resilience Teamwork	Independence Resilience Teamwork

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

	Curiosity Patience Confidence	Curiosity Patience Confidence	Curiosity Patience Confidence
Year 2	**Autumn**	**Spring** **Including Maths Core Review**	**Summer**
	Number and place value • recognise the place value of each digit in a two-digit number (tens, ones) • identify, represent and estimate numbers within 100 using different representations, including the number line . • count in steps of 2, 5,and 10 from 0, and in tens from any number, forward and backward using practical and recorded ways • read and write numbers to a 100 in numerals and in words • compare and order numbers from 0 up to 100; use < > and = signs • use place value and number facts to solve problems.	**Number and place value** • recognise the place value of each digit in a two-digit/three digit number (tens, ones) • identify, represent and estimate numbers using different representations within and over 100, including the number line • read and write numbers toat least a 100 in numerals and in words consistently and accurately. • compare and order numbers from 0 up to 1000; use< > and = signs and solve problems with comparison. • Partition two digit numbers in different ways. Show in apparatus and recorded forms. • count in steps of 2, 3, 5 and 10 from 0, and in tens from any number, forward and backward and use skill to solve problems. • use place value and number facts to solve problems.	**Number and place value** • count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward • review place value of each digit in a two/three-digit number-calculating missing numbers and recognising addition and subtraction patterns • identify, represent and estimate numbers using different representations, including the vertical number line and scales. • compare and order numbers in difierent contexts ie measures and money, from 0 up to 1000; using >< and = signs • review reading and writing of numbers to at least 1000 in numerals and in words • use place value and number facts to solve two step problems. • Solve complex problems showing reasoning.
	Number- addition and subtraction • solve addition and subtraction calculations: using concrete objects and pictorial representations,(part, part, whole method, bar models) (number lines, 100 squares, bead strings, diennes, numicon) including those involving numbers, quantities and measures. • Apply skills and show their working when solving number problems	**Number- addition and subtraction** • solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying <u>their increasing knowledge</u> of mental and written methods including expanded addition and subtraction methods.	**Number- addition and subtraction** • solve problems with addition and subtraction: applying their increasing knowledge of mental and written methods including column addition and subtraction • review and build on number facts 2 if I know this then I know that. 7 + 10 =/ 17 + 10/ 70 + 10 =

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

	• recall and use addition and subtraction facts in 10 and 20 fluently, and derive and use related number facts for 100 (multiples of 10) • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: adding three one-digit numbers (using bond knowledge) a two-digit number and ones(not crossing tens boundary) a two-digit number and tens two, two-digit numbers • show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.	• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100, completing missing number calculations. • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones(crossing tens boundary/subitising) a two-digit number and tens two two-digit numbers adding three one-digit numbers • review that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot • understand the inverse relationship between addition and subtraction and use this to solve missing number problems.	• continue to practise skills in adding and subtracting numbers using, pictorial representations, and mentally, including: a two-digit number and tens two, two-digit numbers • use the inverse relationship between addition and subtraction to check calculations and solve missing number problems.
	Number- multiplication and division • Teach odd and even numbers, solving simple problems. • recall and use multiplication facts for the 2, 5 and 10 multiplication tables. • Show multiplication as repeated addition and groups of. • calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (×),and equals (=) signs. • show that multiplication of two numbers can be done in any order (commutative)	**Number- multiplication and division** • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs • show that multiplication of two numbers can be done in any order (commutative) and show inverse relationships. • Solve missing number calculations using inverse operations	**Number- multiplication and division** • recall and use multiplication and division facts for the 2, 3, 5 and 10 multiplication tables. Solve missing number equations using fact knowledge and explain reasoning. • Solve reasoning problems involving odd and even numbers. • Record working when solving word problems showing mathematical statements for multiplication and division within the multiplication tables and writing them using the multiplication (×), division (÷) and equals (=) signs

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

	• solve problems involving multiplication and using practical materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts. • Show division as equal groupings • calculate mathematical statements for division using the division (÷) • show that division of two numbers can't be done in any order • solve problems involving division and using practical materials, arrays, mental methods, and division/multiplication facts, including problems in contexts.	• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	• Use multiplication and division in real life curriculum applications.
	Fractions • recognise, find, name and write fractions ½ , ¼ and ¾ of a shape, set of objects or quantity • write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½ .	**Fractions** • recognise, find, name and write fractions 1/3 , ¼ , 2/4 and ¾ of a length, shape, set of objects or quantity • write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½. • Solve problems involving fractions • Compare fractions of a shape using < and > and =	**Fractions** • recognise, find, name and write fractions 1/3 , ¼ , 2/4 and ¾ of a length, shape, set of objects or quantity • write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½. • Compare fractions of a shape and number • Solve fractions problems in different contexts and real-life situations • Link fractions to multiplication
	Measurement • recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value within a £1.00 • find different combinations of coins that equal the same amounts of money • solve simple problems in a practical context involving addition and subtraction of money of the same unit	**Measurement** • recognise and use symbols for pounds (£) and pence (p); review combining amounts to make a particular value over a £1.00 • find different combinations of coins that equal the same amounts of money over £1.00 • solve simple problems in a practical context involving addition and subtraction of money	**Measurement** • recognise and use symbols for pounds (£) and pence (p); review combining amounts to make a particular value up to £10.00 • find different combinations of coins that equal the same amounts of money up to £10.00 • solve simple problems in a practical context involving addition and subtraction of money

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

	• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); using rulers, scales, • compare and order lengths in cm and m, mass g and kg, and record the results using >, < and = • tell and write the time and review o'clock , including half and quarter past/to the hour and draw the hands on a clock face to show these times using an analogue clock • know the number of minutes in an hour and the number of hours in a day. • Review the days of the week and months of the year.	of the same unit including finding the correct change in one / two step problems • choose and use appropriate standard units to estimate and measure capacity (litres/ml) • read scales with different integers in divisions of ones, twos , five tens including temperature • solve problems and compare and order lengths in cm and m, mass g and kg, capacity and record the results using >, < and = • review analogue times and solve problems involving the passing of time in different units • Tell and record the time in five minute intervals • Introduce digital clocks	of the same unit including finding the correct change in two step problems • Solve simple number problems with different outcomes encouraging reasoning and resilience • read and calculate missing integers on scales • solve two-step problems and compare and order lengths in cm and m, mass g and kg, capacity and record the results using >, < and = • Review telling the time in five minute intervals to and past the hour and solve problems • Record and the time using digital and analogue clocks
	Geometry- properties of shapes • identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line . • compare and sort common 2-D shapes and everyday objects. • identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces . Look for shapes in the environment. •	**Geometry- properties of shapes** • identify and describe the properties of 2-D shapes, including lines of symmetry in a horizontal and vertical line. • compare and sort common 2-D shapes and everyday objects in venn and carroll diagrams. • complete tables listing shape properties • describe the properties of 3-D shapes, including the number of edges, vertices and faces and record and compare in tables • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]	**Geometry- properties of shapes** • identify and describe the properties of 2-D shapes, including all lines of symmetry • describe the properties of 3-D shapes, including the number of edges, vertices and faces and record and compare in tables • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • sort and itentify odd shapes out in sets involving reasoning. Sort own shapes and use own criteria for labels. • Use nets to makes 3D shapes from construction and from paper.(cylinder, cube, cuboid, triangular prism)
	Geometry- position and direction	**Geometry- position and direction**	**Geometry- position and direction**

Emmbrook Infant School EYFS and KS1 Maths Termly Overview

	• Complete repeating patterns using objects or shapes • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line (forwards, backwards, right, left, sideways, inbetween, next to, before, after) • introduce rotation as a physical turn and in terms of right angles for quarter, half and three-quarter turns	• create repeating patterns using objects or shapes in increasing complexity • use mathematical vocabulary to solve problems involving position, direction and movement, including movement in a straight line (forwards, backwards, right, left, sideways, inbetween, next to, before, after) • use bee bots or objects to direct using vocabulary • use rotation to create patterns with shape and objects. Identify the amount of turn in a pattern.	• link the use of mathematical vocabulary to solve problems across the curriculum (geography mapping) involving position, direction and movement, including movement in a straight line (forwards, backwards, right, left, sideways, inbetween, next to, before, after) • use bee bots and robots to direct along a given route using appropriate positional vocab vocabulary. Create routes and explain. • Use rotation to create patterns in art printing
	Statistics • construct simple tally charts and pictograms • answer simple questions by counting the number of objects in each category and sorting the categories by quantity • answer questions about totalling and comparing categorical data	**Statistics** • interpret and construct simple tally charts, block diagrams and simple tables such as Venn diagrams and Carroll diagrams • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions about totalling and comparing categorical data	**Statistics** • interpret and construct their own simple pictograms, tally charts, block diagrams and simple tables • Create own Venn diagrams and Carroll diagrams to sort data • Interpret data and enter data to change question outcomes • sort categories by quantity
Core Values	Independence Resilience Teamwork Curiosity Patience Confidence	Independence Resilience Teamwork Curiosity Patience Confidence	Independence Resilience Teamwork Curiosity Patience Confidence