Threshold Concepts		Reception (40-60 months)	Year 1	Year 2
Number (N)	Place Value	Count reliably with numbers from 1 to 20 and place them in order	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	
		Select the correct numeral to represent 1-10 objects	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
		Say which number is one more and one less than a given number (up to 10)	Given a number, identify one more and one less	Given a number, identify ten more and ten 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	Identify, represent and estimate numbers using different representations, including the number line
		Record, using marks that they can interpret and explain	Read and write numbers from 1 to 20 in numerals and words.	Read and write numbers to at least 100 in numerals and in words
Number	Addition and Subtraction		Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

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		Use number bonds within 10 using practical resources	Represent and use number bonds and related subtraction facts within 20	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
		Find the total number of items in two groups by counting all of them	Add and subtract one-digit and two-digit numbers to 20, including zero	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
		Using quantities and objects, add and subtract two single digit numbers. .	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems	Solve problems with addition and subtraction: ▪ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ▪ applying their increasing knowledge of mental and written methods
Number	**Multiplication & Division**	Solve problems including doubling, halving and sharing	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.	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.
			Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs

			(×), division (÷) and equals (=) signs	Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
		Use practical objects to count in twos Halve groups of objects by sharing	Count in multiples of twos, fives and tens	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Number	**Fractions**	Solve problems including halving	Recognise, find and name a half as one of two equal parts of an object, shape or quantity	Recognise, find, name and write fractions 1/3, ¼. 2/4, and 3/4 of a length, shape, set of objects or quantity
			Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	Write simple fractions for example, ½ of 6=3 and recognise the equivalence of and 1/2
Measurement (M)	**Height, Weight, Length, Capacity**	Order two or three items by length or height. Orders two items by weight or capacity	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]	Compare and order lengths, mass, volume/capacity and record the results using >, < and =

			▪ capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] ▪ time [for example, quicker, slower, earlier, later]	
		Measure ▪ lengths and heights ▪ mass/weight ▪ capacity and volume ▪ time (hours, minutes, seconds) ▪ lengths and heights	Measure and begin to record the following: ▪ lengths and heights ▪ mass/weight ▪ capacity and volume ▪ time (hours, minutes, seconds)	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
Measurement	**Money**	Beginning to use everyday language related to money.	Recognise and know the value of different denominations of coins and notes	Recognise and use symbols for pounds (£) and pence (p) Combine amounts to make a particular value Find different combinations of coins that equal the same amounts of money Add and subtract money of the same unit, including giving change
	Time	Orders and sequence familiar events.	Sequence events in chronological order using language (before, after, next, first, today, yesterday, tomorrow, morning, afternoon, evening)	Compare and sequence intervals of time

		Uses everyday language related to time.	Recognise and use language relating to dates, including days of the week, weeks, months and years	Spell language relating to dates, including days of the week, weeks, months and years
		Measures short periods of time in simple ways.	Tell the time to the hour and half past the hour and draw hand on a clock face to show these times	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

Know the number of minutes in an hour and the number of hours in a day. |
| **Geometry (G)** | **Properties of Shape** | Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.

Select a particular named shape. | Recognise and name common 2D and 3D shapes (including: rectangles (including squares), circles and triangles) (cuboids (including cubes), pyramids and spheres) | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line

Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces

Compare and sort common 2-D and 3-D shapes and everyday objects.

Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] |
| | **Position and Direction** | Can describe their relative position such as 'behind' or 'next to'. | Describe position, direction and movement, including whole, half, quarter and three quarter turns | Order and arrange combinations of mathematical objects in patterns and sequences

Use mathematical vocabulary to describe position, direction and |

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				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).
	Statistics			Interpret and construct simple pictograms, tally charts, block diagrams and simple tables 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.

Assessment		Observations (formative) Working 1:1	Formative assessment AfL opportunities Summative (Half termly end of unit assessments) Monitoring of Mathletics usage	Formative assessment AfL opportunities Summative (end of unit assessments,) Monitoring of Mathletics usage KS1 Tests

ELG

Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

KS1 TAF

EXS:- The pupil can
• read scales* in divisions of ones, twos, fives and tens
• partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus
• add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus
• recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships
• recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary
• identify 1/4, 1/3 , 1/2 , 2/4, 3/4, of a number or shape, and know that all parts must be equal parts of the whole
• use different coins to make the same amount
• read the time on a clock to the nearest 15 minutes
• name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry.

GDS:-
read scales* where not all numbers on the scale are given and estimate points in between
• recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts
• use reasoning about numbers and relationships to solve more complex problems and explain their thinking
• solve unfamiliar word problems that involve more than one step (e.g. 'which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?')
• read the time on a clock to the nearest 5 minutes
• describe similarities and differences of 2-D and 3-D shapes, using their properties

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Breadth		Reception	Year 1	Year 2
Number	**Place Value**		Aut 1 (wk 1-4) Aut 2 (wk 5-7) Spr 1 (wk 5-6) Spr 2 (wk 1) Sum 2 (wk 1-2)	Aut 1 (wk 1-4)
	Addition and Subtraction		Aut 1 (wk 5-7) Aut 2 (wk 1-2) Spr 1 (wk 1-4)	Aut 1 (wk 5-7) Aut 2 (wk 1-3) Sum 1 (wk 3-4)
	Multiplication and Division	Summer 2	Aut 2 (wk 4) Spr 1 (wk 5-6) Spr 2 (wk 2-3) Sum 1 (wk 2-3)	Aut 2 (wk 6-7) Spr 1 (wk 1-2)
	Fractions		Sum 1 (wk 4-6)	Spr 2 (wk 2-4)
Measurement	**Height, Weight, Length, Capacity**		Spr 2 (wk 4-6) **Ongoing throughout year**	Spr 2 (wk 5) Sum1 (wk 1) Sum 2 (wk 1-2)
	Money		Aut 2 (wk 4) Sum 2 (wk 3) **Ongoing throughout year**	Aut 2 (wk 4-5)
	Time		Sum 2 (wk 4-5) **Ongoing throughout year**	Sum 1 (wk 1-2)
Geometry	**Properties of Shape**		Aut 2 (wk 3) Sum 2 (wk 6-7)	Spr 1 (wk 6) Spr 2 (wk 1)
	Position and Direction		Sum 1 (wk 1)	Spr 2 (wk 6)
Statistics				Spr 1 (wk 3-5)