Bridging from EYFS into Year One - Mathematics

Mathematics in the **Early Years** involves providing children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces, and measure. The principal focus of mathematics teaching in **Key Stage 1** is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length. By **lower Key Stage 2,** pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. By **upper Key Stage 2**, pupils should be fluent in arithmetic and develop their ability to solve a wider range of problems, including using algebra.

YFS rand	End of Nursery	End of Reception	Year One	
Number	• Recognise and name colours: Red, Blue, Yellow, Green, Orange, Black, Purple, Brown, White • Sort objects by different attributes • Give 1 or 2 objects on request • Be able to count by rote to 10 • Link numerals and quantities to 4 • Recognise up to 3 objects without counting • Say one number for each item in order to 5 • Compare quantities using 'more than, fewer than'. • Show finger numbers up to 5 • Make their own marks and number symbols	• To order the numbers to 5 • Subitise to 5 • Show accuracy when counting out 7 objects (or less) from a larger group • Discuss composition of number to 5, showing automatic recall of number facts. • Count by rote to 20 • Count back from 10 • Count on from a given number to 20 • Discuss composition of number to 10, showing some recall of number facts. • Say the number one more/less than a given number 1 - 10.	• 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 and Place Value**

		• Identify parts within numbers (group of 4 and say 'I see 2 and another 2'). • Be able to combine two groups and say how many altogether • Subtract single digit numbers **ELG - 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. **ELG – 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.	• 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.	**Addition and subtraction**
			• 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**
			• 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.	**Number - fractions**

[illegible]	• Understand and use the language 'big/small'
	• Make comparisons between objects relating to height and capacity
	• Describe a sequence of events using 'first, then'
	• Make comparisons between objects relating to length and weight
		• Understand yesterday/today/tomorrow
		• Recite the days of the week
		• Use and understand the terms short, tall, shorter, taller and be able to make direct comparisons.
		• Use language and make direct comparisons of capacity
		• Understand morning, afternoon, day, night.
		• Understand a simple sequence of events
			• 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
			  ○ 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.
				Measurement

Shape & Pattern	• Identifying and naming shapes: squares, rectangles, circles, triangles • Be able to describe 2D shapes; curved, straight, sides • Identify and describe shapes and how they look: using the words 'straight, flat, round, sides, corners'. • Copy a 2 part pattern. • Continue a 2 part pattern • Create a 2 part pattern	• Identify straight and curved sides on 2D shapes (triangle, rectangle, square, circle), and flat and curved faces on 3D shape • Identify and name 3D shapes (cylinder, cube, cuboid, sphere) talk about their properties. • Make their own ABB pattern. • Make their own ABBC pattern.	• 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].	**Properties of shapes**
Space	• Understand and use the language 'in, on, under' • Be able to understand position through words alone	• Understand and use the language: next to, between, below, above, under, in front, behind, close to, far away • Understand and use the language: forwards, backwards, sideways, through, above, below, opposite.	• Describe position, direction and movement, including whole, half, quarter and three quarter turns.	**Geometry – position and direction**