Longlands Primary School

Maths Progression of Skills

EYFS / Key Stage 1

	EYFS	Year 1	Year 2	End of Key Stage expectations
Number and Place Value	<u>Number</u> 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. <u>Numerical Patterns</u> 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.	1.1 I can count to and across 100 forwards and backwards, beginning with 0 or 1, or from any given number. 1.2 I can count, read and write numbers to100 in numerals. 1.3 I can count in multiples of twos, fives and tens 1.4 I can identify one more and one less when given a number. 1.5 I can identify and represent numbers using objects and pictorial representations including the number line 1.6 I can use the language of equal to, more than, less then, fewer, most, least. 1.7 I can read and write numbers from 1 to 20 in numerals and words.	2.1 I can count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. 2.2 I can recognise the place value of each digit in a two-digit number (tens, ones). 2.3 I can identify, represent and estimate numbers using different representations, including the number line. 2.4 I can compare and order numbers from 0 up to 100; use and = signs. 2.5 I can read and write numbers to at least 100 in numerals and in words. 2.6 I can use place value and number facts to solve problems.	• I can read scales in divisions of ones, twos, fives and tens. • I can partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus. **GD**: I can read scales where not all numbers on the scale are given and estimate points in between.

Number – Addition and Subtraction		*1.a.1 I can read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.* *1.a.2 I can represent and use number bonds and related subtraction facts within 20.* *1.a.3 I can add and subtract one-digit and two-digit numbers to 20, including zero.* *1.a.4 I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9.*	*2.a.1 I can solve problems with addition and subtraction:* *I. using concrete objects and pictorial representations, including those involving numbers, quantities and measures* *II. applying my increasing knowledge of mental and written methods.* *2.a.2 I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.* *2.a.3 I can add and subtract numbers using concrete objects, pictorial representations, and mentally, including:* *I. a two-digit number and ones* *II. a two-digit number and tens* *two two-digit numbers* *III. adding three one-digit numbers.* *2.a.4 I can show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.*	• *I can add and subtract any 2 two-digit numbers using an efficient strategy, explaining my method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17).* • *I can 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 (e.g. If 7 + 3 = 10 then 17 + 3 = 20; if 7 – 3 = 4 then 17 – 3 = 14; leading to if 14 + 3 = 17, then 3 + 14 = 17, 17 – 14 = 3 and 17 – 3 = 14)*

			2.a.5 I can recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	
Number – Multiplication and Division		1.b.1 I can 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.	2.b.1 I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. 2.b.2 I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. 2.b.3 I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. 2.b.4 I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	• I can recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary. **GD**: I can recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts **GD**: I can use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ¨ ; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc)

				GD: *I can 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?')*
Number – Fractions		*1.c.1 I can recognise, find and name a half as one of two equal parts of an object, shape or quantity.* *1.c.2 I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.*	*2.c.1 I can recognise, find, name and write fractions a third, a quarter, two quarters / a half, three quarters of a length, shape, set of objects or quantity.* *2.c.2 I can write simple fractions and recognise the equivalence of two quarters and a half.*	• *I can identify a quarter, a third, a half, two quarters and three quarters of a number or shape, and know that all parts must be equal parts of the whole*
Measurement		*1.d.1 I can compare, describe and solve practical problems for :* *I. lengths and heights (for example long/short, longer/shorter, tall/short, double/half)* *II. mass/weight (for example heavy/light, heavier than, lighter than)*	*2.d.1 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 (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.*	• *I can use different coins to make the same amount.* • *I can read the time on a clock to the nearest 15 minutes* **GD**: *I can read the time on a clock to the nearest 5 minutes*

		III. capacity and volume (for example, full/empty, more than, less than, half full, quarter) IV. time (for example quicker, slower, earlier, later). 1.d.2 I can measure and begin to record the following: I. Lengths and heights II. Mass/weight III. Capacity and volume IV. Time (hours, minutes, seconds) 1.d.3 I can recognise and know the value of different denominations of coins and notes. 1.d.4 I can sequence events in chronological order using language (before/after, next, first, today, yesterday, tomorrow, morning, afternoon, evening. 1.d.5 I can recognise and use language relating to dates, including	2.d.2 I can compare and order lengths, mass, volume/capacity and record the results using >, < and =. 2.d.3 I can recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value 2.d.4 I can find different combinations of coins that equal the same amounts of money. 2.d.5 I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. 2.d.6 I can compare and sequence intervals of time. 2.d.7 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 I know the number of minutes in an hour and the number of hours in a day.	

		days of the week, weeks, months and years. *1.d.6 I can tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.*		
Geometry – Properties of Shapes		*1.e.1 I can recognise and name common 2-D and 3-D shapes, including* *I. 2-D shapes [for example, rectangles (including squares), circles and triangles]* *II. 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].*	*2.e.1 I can identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.* *2.e.2 I can identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.* *2.e.3 I can identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].* *2.e.4 I can compare and sort common 2-D and 3-D shapes and everyday objects.*	• *I can name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry.* ***GD**: I can describe similarities and differences of 2-D and 3-D shapes, using their properties (e.g. that two different 2-D shapes both have only one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices, but different dimensions).*

Geometry – Position and Direction		*1.f.1 I can describe position, direction and movement, including whole, half, quarter and three quarter turns.*	*2.f.1 I can order and arrange combinations of mathematical objects in patterns and sequences.* *2.f.2 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 anticlockwise).*	
Statistics			*2.g.1 I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables.* *2.g.2 I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.* *2.g.3 I can ask and answer questions about totalling and comparing categorical data.*	
By the end of KS1 children should be confident mathematicians, using appropriate language and answering with full sentences.				

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.