Roe Green Infant School

Maths – Knowledge and Skills Progression

	Reception	Year 1	Year 2
Number and Place Value	• Explore the composition of numbers to 10. • Subitise (recognise quantities without counting) up to 5 • Count beyond 10 • Compare numbers • Compares quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. (ELG) • Explore and represent patterns within numbers up to 10 including evens and odds, double facts and how quantities can be distributed equally. (ELG) • Verbally count beyond 20, recognising the pattern of the counting system. (ELG)	• 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 • identify and represent numbers using objects and pictorial representations including the number line, & use language of: equal to, more than, less than (fewer), most, least • read and write numbers from 1 to 20 in numerals and words • read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • given a number, identify one more and one less • represent and use number bonds and related subtraction facts within 20	• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward • recognise the place value of each digit in a two-digit number • compare and order numbers from 0 up to 100; use <, > and = signs • identify, represent and estimate numbers using different representations, including the number line • read and write numbers to at least 100 in numerals and in words • use place value and number facts to solve problems

Addition and Subtraction	• 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) • Have a deep understanding of number to 10, including the composition of each number. (ELG)	• 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.	• add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T, TO+TO and O+O+O • show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot • solve problems with addition and subtraction, using concrete, pictorial and abstract representations • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
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.	• 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 division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

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.	• recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity • write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2.
Time	• Use everyday Language related to time. • Order and sequence familiar events. • Measures short periods of time in simple ways. (Not in the new EYFS Framework, but taught in the White Rose S.o.W)	• Sequence events in chronological order using language. • Recognise and use language related to dates, including days of the week, months and years. • Tell the time to the hour and half past and draw the hands on a clock face to show these times.	• Compare and sequence interval times. • Tell and write the time to five minutes, including quarter to/past 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.

Money	• Beginning to use everyday language relates to money. (Not in the new EYFS Framework, but taught in the White Rose S.o.W)	• Recognise and know the value of different denominations of coins and notes	• Recognise and use symbols for pounds (£) and pence (p • 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, including giving change
2D shapes	• Select, rotate and manipulate shapes in order to develop special reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it just as numbers can.	• Recognise and name common 2-D shapes (e.g. Square, circle, triangle) •	• 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 and 3-D shapes and everyday objects.
3D shapes	• Beginning to use mathematical names for 'solid' 3D shapes and begin to use mathematical terms to describe shapes. • Selects a particular shape named shape (Not in the new EYFS Framework, but taught in the White Rose S.o.W)	• Recognise and name common 3-D shapes (e.g. Cubes, cuboids, pyramids & spheres)	• Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces • Identify 2-D shapes on the surface of 3-D shapes. • Compare and sort common 2-D and 3-D shapes and everyday objects.

Measure	• Compare length, weight and capacity	• Compare, describe and solve practical problems for: length/height, weight/mass, capacity/volume & time • Measure and begin to record length/height, weight/mass, capacity/volume & time	• Choose and use appropriate standard units to estimat (kg/g); temperature (°C); capacity (litres/ml) to the ne thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and =
Mensuration			
Position & Direction	• Can describe their relative position such as 'behind' or 'next to'. (Not in the new EYFS Framework, but taught in the White Rose S.o.W)	• 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 movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and ¾ turns

Angles			
Interpreting Data		• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables	• Interpret and present data using bar charts, pictograms and tables
Decimals			
Percentages			
Ration & Proportion			
Algebra			