# Moorland Primary School – Progression of Knowledge in Maths

| Year 2 | Place value | Addition and subtraction | Multiplication and division | Fractions | Measurement |
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| | **COUNTING**<br>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.<br><br>**COMPARING NUMBERS**<br>Compare and order numbers from 0 up to 100; use and = signs.<br><br>**IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS**<br>Identify, represent and estimate numbers using different representations, including the number line.<br><br>**READING AND WRITING NUMBERS**<br>Read and write numbers to at least 100 in numerals and in words.<br><br>**UNDERSTANDING PLACE VALUE**<br>Recognise the place value of each digit in a two-digit number (tens, ones).<br><br>**PROBLEM SOLVING**<br>Use place value and number facts to solve problems | **NUMBER BONDS**<br>Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.<br><br>**MENTAL CALCULATION**<br>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<br>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.<br><br>**INVERSE OPERATIONS, ESTIMATING AND CHECKING ANSWERS**<br>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.<br><br>**PROBLEM SOLVING**<br>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 solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | **MULTIPLICATION & DIVISION FACTS**<br>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward (copied from Number and Place Value) Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.<br><br>**MENTAL CALCULATION**<br>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.<br><br>**WRITTEN CALCULATION**<br>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.<br><br>**PROBLEM SOLVING**<br>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. | **COUNTING IN FRACTIONAL STEPS**<br>Pupils should count in fractions up to 10, starting from any number and using the1/2 and 2/4 equivalence on the number line (Non-Statutory Guidance)<br><br>**RECOGNISING FRACTIONS**<br>Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity.<br><br>**EQUIVALENCE**<br>Write simple fractions e.g. 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2. | **COMPARING AND ESTIMATING**<br>Compare and order lengths, mass, volume/capacity and record the results using >, < and =. Compare and sequence intervals of time.<br><br>**MEASURING & CALCULATING**<br>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.<br><br>**MONEY**<br>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. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.<br><br>**TELLING THE TIME**<br>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.<br><br>**CONVERTING**<br>Know the number of minutes in an hour and the number of hours in a day. |

# Moorland Primary School – Progression of Knowledge in Maths

| Year 2 | Geometry | Statistics | Algebra |
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| | 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 anti-clockwise).<br>Order and arrange combinations of mathematical objects in patterns and sequences.<br>Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line<br>Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.<br>Identify 2D shapes on the surface of 3D shapes e.g a circle on a cylinder and a triangle on a pyramid.<br>Compare and sort common 2D and 3D shapes and everyday objects. | Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.<br>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.<br>Ask and answer questions about totalling and comparing categorical data. | Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems<br>Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100 |