**Key Learning in Mathematics – Year 2**

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| **Number – number and place value** | **Number – addition and subtraction** | **Number – multiplication and division** |
| * Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward * Read and write numbers to at least 100 in numerals and in words * Recognise the place value of each digit in a two-digit number (tens, ones) * Identify, represent and estimate numbers using different representations, including the number line * *Partition numbers in different ways (e.g. 23 = 20 + 3 and 23 = 10 + 13)* * Compare and order numbers from 0 up to 100; use <, > and = signs * *Find 1 or 10 more or less than a given number* * *Round numbers to at least 100 to the nearest 10* * *Understand the connection between the 10 multiplication table and place value* * *Describe and extend simple sequences involving counting on or back in different steps* * Use place value and number facts to solve problems | * *Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting)* * *Select a mental strategy appropriate for the numbers involved in the calculation* * Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot * *Understand subtraction as take away and difference (how many more, how many less/fewer)* * Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 * *Recall and use number bonds for multiples of 5 totalling 60 (to support telling time to nearest 5 minutes)* * 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   * Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems * Solve problems with addition and subtraction *including with missing numbers:* - using concrete objects and pictorial representations, including those   involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods | * *Understand multiplication as repeated addition* * *Understand division as sharing and grouping and that a division calculation can have a remainder* * Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot * Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers * *Derive and use doubles of simple two-digit numbers (numbers in which the ones total less than 10)* * *Derive and use halves of simple two-digit even numbers (numbers in which the tens are even)* * Calculate mathematical statements for multiplication *using repeated addition)* and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs * Solve problems involving multiplication and division *(including those with remainders)*, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts |
| **Number – fractions** |
| * *Understand and use the terms numerator and denominator* * *Understand that a fraction can describe part of a set* * *Understand that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be* * Recognise, find, name and write fractions , , and of a length, shape, set of objects or quantity * Write simple fractions for example, of 6 = 3 and recognise the equivalence of and * *Count on and back in steps of and* |
| **Measurement** |
| **Geometry – properties of shapes** | * Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity and volume (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels * Compare and order lengths, mass, volume/capacity and record the results using >, < and = * 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 * Compare and sequence intervals of time * 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 * Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change *and measures (including time)* |
| * 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 * Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] |
| **Geometry – position and direction** |
| * Order/arrange combinations of mathematical objects in patterns/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 three-quarter turns (clockwise and anti-clockwise) |
| **Statistics** |
| * Compare and sort *objects, numbers and* common 2-D and 3-D shapes and everyday objects * 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 |