

## Key Learning in Mathematics – Year 2

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
<ul style="list-style-type: none"> <li>▪ Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.</li> <li>▪ Read and write numbers to at least 100 in numerals and in words.</li> <li>▪ Recognise the place value of each digit in a two-digit number (tens, ones).</li> <li>▪ Identify, represent and estimate numbers using different representations, including the number line.</li> <li>▪ Partition numbers in different ways (e.g. <math>23 = 20 + 3</math> and <math>23 = 10 + 13</math>).</li> <li>▪ Compare and order numbers from 0 up to 100; use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs.</li> <li>▪ Find 1 or 10 more or less than a given number.</li> <li>▪ Round numbers to at least 100 to the nearest 10.</li> <li>▪ Understand the connection between the 10 multiplication table and place value.</li> <li>▪ Describe and extend simple sequences involving counting on or back in different steps.</li> <li>▪ Use place value and number facts to solve problems.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting).</li> <li>▪ Select a mental strategy appropriate for the numbers involved in the calculation.</li> <li>▪ Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</li> <li>▪ Understand subtraction as take away and difference (how many more, how many less/fewer).</li> <li>▪ Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</li> <li>▪ Recall and use number bonds for multiples of 5 totalling 60 (to support telling time to nearest 5 minutes).</li> <li>▪ Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:               <ul style="list-style-type: none"> <li>- a two-digit number and ones.</li> <li>- a two-digit number and tens.</li> <li>- two two-digit numbers.</li> <li>- adding three one-digit numbers.</li> </ul> </li> <li>▪ Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</li> <li>▪ Solve problems with addition and subtraction <i>including with missing numbers</i>:               <ul style="list-style-type: none"> <li>- using concrete objects and pictorial representations, including those involving numbers, quantities and measures.</li> <li>- applying their increasing knowledge of mental and written methods.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Understand multiplication as repeated addition.</li> <li>▪ Understand division as sharing and grouping and that a division calculation can have a remainder.</li> <li>▪ Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</li> <li>▪ Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</li> <li>▪ Derive and use doubles of simple two-digit numbers (numbers in which the ones total less than 10).</li> <li>▪ Derive and use halves of simple two-digit even numbers (numbers in which the tens are even).</li> <li>▪ Calculate mathematical statements for multiplication <i>using repeated addition</i>) and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (<math>=</math>) signs.</li> <li>▪ Solve problems involving multiplication and division (<i>including those with remainders</i>), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</li> </ul>

## Key Learning in Mathematics – Year 2

Number – fractions	Geometry – properties of shapes	Measurement
<ul style="list-style-type: none"> <li>▪ Understand and use the terms <i>numerator</i> and <i>denominator</i>.</li> <li>▪ Understand that a fraction can describe part of a set.</li> <li>▪ Understand that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be.</li> <li>▪ Recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity.</li> <li>▪ Write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math>.</li> <li>▪ Count on and back in steps of <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math>.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.</li> <li>▪ Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.</li> <li>▪ Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].</li> </ul> <p style="text-align: center;"><b>Geometry – position and direction</b></p> <ul style="list-style-type: none"> <li>▪ Order/arrange combinations of mathematical objects in patterns/sequences.</li> <li>▪ 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).</li> </ul>	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =.</li> <li>▪ Recognise and use symbols for pounds (£) and pence (p).</li> <li>▪ Combine amounts to make a particular value.</li> <li>▪ Find different combinations of coins that equal the same amounts of money.</li> <li>▪ Compare and sequence intervals of time.</li> <li>▪ 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.</li> <li>▪ Know the number of minutes in an hour and the number of hours in a day.</li> <li>▪ Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change <i>and measures (including time)</i>.</li> </ul>
		<p style="text-align: center;"><b>Statistics</b></p> <ul style="list-style-type: none"> <li>▪ Compare and sort <i>objects, numbers and</i> common 2-D and 3-D shapes and everyday objects.</li> <li>▪ Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</li> <li>▪ Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</li> <li>▪ Ask and answer questions about totalling and comparing categorical data.</li> </ul>