

## Mathematics

## Key Learning Indicators of Performance: Year 2

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
<ul> <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. 23 = 20 + 3 and 23 = 10 + 13).</li> <li>Compare and order numbers from 0 up to 100; use &lt;, &gt; and = 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> <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 (bonds totalling 5, 10 and 20).</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> <li>a two-digit number and tens.</li> <li>two two-digit numbers.</li> </ul> </li> <li>Becognise 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 including with missing numbers: <ul> <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> <li>Understand multiplication as repeated addition and arrays.</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 using repeated addition) and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.</li> <li>Solve problems involving multiplication and division facts. including those with remainders), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</li> </ul>



## Mathematics Key Learning Indicators of Performance: Year 2

Number – fractions	Geometry – properties of shapes	Measurement
<ul> <li>Understand and use the terms numerator and denominator.</li> <li><u>Understand that a fraction can describe part of a set.</u></li> <li><u>Understand that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be.</u></li> <li><u>Recognise, find, name and write fractions</u> <sup>1</sup>/<sub>3</sub>, <sup>1</sup>/<sub>4</sub>, <sup>2</sup>/<sub>4</sub> and <sup>3</sup>/<sub>4</sub> of a length, shape, set of objects or quantity.</li> <li>Write simple fractions for example, <sup>1</sup>/<sub>2</sub> of 6 = 3 and recognise the equivalence of <sup>2</sup>/<sub>4</sub> and <sup>1</sup>/<sub>2</sub>.</li> <li><i>Count on and back in steps of</i> <sup>1</sup>/<sub>2</sub> and <sup>1</sup>/<sub>4</sub>.</li> </ul>	<ul> <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> <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> <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 neare appropriate unit, using rulers, scales, thermometers and measuring vessels (within children's place value competence).</li> <li>Compare and order lengths, mass, volume/capacity and reco 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 additic and subtraction of money of the same unit, including giving change and measures (including time).</li> </ul>
		Statistics
		<ul> <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> </ul>

Ask and answer questions about totalling and comparing categorical data.