## MathsMap RouteMap Year 2

Strand Tier	Number and Place Value, approximation and estimation/rounding	Addition, Subtraction, Multiplication & Division (Calculation)	Fractions, Decimals and Percentages	Measurement	Geometry – Properties of Shape & Position and Direction	Statistics
17 End of Year 2 exp's	Use place value and number facts to solve problems.     Identify, represent and estimate numbers using different representations, including the number line.     Recognise the place value of each digit in a two-digit number (tens, ones)	<ul> <li>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</li> <li>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</li> </ul>	<ul> <li>Recognise the equivalence of two quarters and one half</li> <li>Write simple fractions (e.g. ½ of 6 = 3)</li> </ul>	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	Use mathematical vocabulary to describe position, direction and movement, including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise), and movement in a straight line	Ask and answer questions about totalling and comparing categorical data
16	<ul> <li>Compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs.</li> <li>Read and write numbers to at least 100 in numerals and in words.</li> </ul>	<ul> <li>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs</li> <li>Solve problems involving multiplication and division, using a range of strategies, including problems in contexts</li> <li>Recall and use multiplication and division facts for the 5 times tables, including recognising odd and even numbers.</li> </ul>	Recognise, find, name and write fractions <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 set of objects or quantity	Compare and sequence intervals of time	<ul> <li>Identify 2D shapes on the surface of 3D shapes (e.g. a circle on a cylinder and a triangle on a pyramid)</li> </ul>	<ul> <li>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</li> </ul>
15	<ul> <li>Count in steps of 2, 3 and 5 from 0, forward or backward.</li> <li>Count in steps of 10 from any number, forward and backward.</li> </ul>	Solve one-step 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     Recall and use multiplication and division facts for the 2 times tables	• Recognise fractions of a length ( <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> )	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	Identify and describe the properties of 3D shapes including the number of edges, vertices and faces	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables
14	Count forward in steps of 3, starting from 0 Count forward in steps of 10, starting from any number Partition numbers in different ways, e.g. 23 = 20+3; 23 = 10+13) (NB This is from the non-statutory guidance)	<ul> <li>Add and subtract numbers mentally, including:</li> <li>A two-digit number and ones</li> <li>A two-digit numbers and tens</li> <li>Two, two-digit numbers</li> <li>Adding three one-digit numbers</li> </ul>		Recognise and use symbols of pounds (£) and pence (p); combine amounts to make a particular value     Find different combinations of coins that equal the same amounts of money	Identify and describe the properties of 2D shapes , including the number of sides and line symmetry in a vertical line     Order and arrange combinations of mathematical objects in patterns	Collect data and record it in a simple pictogram or block diagram     Draw simple conclusions from data
13	<ul> <li>Recognise the value of the tens digit in multiples of 10</li> <li>Partition numbers into tens and ones using a number sentence (e.g. 47 = 40 + 7)</li> </ul>	<ul> <li>Add and subtract numbers using concrete objects and pictorial representations, including:         <ul> <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> </ul>	• Recognise fractions of a shape ( <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> )	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	Compare and sort common 3D shapes and everyday objects	<ul> <li>Collect data and record it in a simple list or tally chart</li> <li>Answer questions about the data I have collected</li> </ul>
12	Partition numbers into tens and ones using practical apparatus	<ul> <li>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</li> </ul>		Compare and order lengths, mass, volume/capacity and record the results using >, < and =	Compare and sort common 2D shapes and everyday objects	