

# MathsMap RouteMap Year 3

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
20 End of Year 3 Exp's	<ul style="list-style-type: none"> <li>Recognise the place value of each digit in a 3-digit number</li> <li>Solve number problems and practical problems involving each of the below:                             <ul style="list-style-type: none"> <li>Compare and order numbers up to 1000</li> <li>Identify, represent and estimate numbers using different representations, e.g. using Numicon, counting sticks, cubes, 100 squares etc.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Write and calculate mathematical statements for multiplication and division using the multiplication tables the children know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</li> <li>Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems</li> </ul>	<ul style="list-style-type: none"> <li>Compare and order unit fractions and fractions with the same denominators</li> <li>Add and subtract fractions with the same denominator within one whole (e.g. <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>) using practical resources and other common denominators</li> <li>Solve problems that involve both of the above</li> </ul>	<ul style="list-style-type: none"> <li>Measure the perimeter of simple 2D shapes</li> <li>Add and subtract amounts of money to give change, using both £ and p in practical contexts</li> <li>Add and subtract lengths (m/cm/m)</li> <li>Add and subtract mass (kg/g)</li> <li>Add and subtract volume/capacity (l/ml)</li> </ul>	<ul style="list-style-type: none"> <li>Recognise that angles are a property of a shape or a description of a turn</li> <li>Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater or less than a right angle</li> </ul>	<ul style="list-style-type: none"> <li>Solve one-step and two-step questions (e.g. 'How many more?' and 'How many fewer?') using information presented in scaled bar charts, pictograms and tables</li> </ul>
19	<ul style="list-style-type: none"> <li>Read and write numbers to 1000 in numerals and in words</li> <li>Find 10 or 100 more or less than a given number</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li> <li>Recall and use multiplication and division facts for the 3 times tables</li> <li>Recall and use multiplication and division facts for the 4 times tables</li> <li>Recall and use multiplication and division facts for the 8 times tables</li> </ul>	<ul style="list-style-type: none"> <li>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</li> <li>Recognise and show, using diagrams, equivalent fractions with small denominators. (halves, quarters, thirds)</li> </ul>	<ul style="list-style-type: none"> <li>Tell and write the time from an analogue clock; 12-hour clocks</li> <li>Tell and write the time from an analogue clock; 24-hour clocks</li> <li>Tell and write the time from an analogue clock, including using Roman numerals from I to XII</li> <li>Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock/a.m./p.m., morning, afternoon, noon and midnight</li> <li>Know the number of seconds in minute and the number of days in each month, year and leap year</li> <li>Compare durations of events, e.g. to calculate the time taken by particular events or tasks</li> </ul>	<ul style="list-style-type: none"> <li>Draw 2D shapes</li> <li>Make 3D shapes using modelling materials</li> <li>Recognise 3D shapes in different orientations and describe them</li> </ul>	<ul style="list-style-type: none"> <li>Interpret and present data using bar charts, pictograms and tables</li> </ul>
18	<ul style="list-style-type: none"> <li>Count from 0 in multiples of 50</li> <li>Count from 0 in multiples of 100</li> <li>Count from 0 in multiples of 4</li> <li>Count from 0 in multiples of 8</li> </ul>	<ul style="list-style-type: none"> <li>Add and subtract numbers mentally, including:                             <ul style="list-style-type: none"> <li>A three-digit number and ones</li> <li>A three-digit number and tens</li> <li>A three-digit number and hundreds</li> </ul> </li> <li>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</li> </ul>	<ul style="list-style-type: none"> <li>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts</li> <li>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</li> </ul>	<ul style="list-style-type: none"> <li>Compare lengths (m/cm/mm)</li> <li>Compare mass (kg/g)</li> <li>Compare volume/capacity (l/ml)</li> <li>Measure lengths (m/cm/mm)</li> <li>Measure mass (kg/g)</li> <li>Measure volume/capacity (l/ml)</li> </ul>	<ul style="list-style-type: none"> <li>Identify horizontal and vertical lines, and pairs of perpendicular and parallel lines</li> </ul>	