

## 8n Class - Navigator Curriculum 3 hours per work. Max 6 hours per topic.

Core mathematical facts, concepts, methods and strategies  
Apply understanding with some independence.

Year	2022 – 2023 Autumn 1	2022 – 2023 Autumn 2	2022 – 2023 Spring 1	2022 – 2023 Spring 2	2022 – 2023 Summer 1	2022 – 2023 Summer 2
	<p><b>Topic:</b> Calculation=addition and subtraction. Fractions and decimals and percentages. Measure and accuracy-Money</p> <p><b>Suggested Key Questions</b> Can you confidently use some basic knowledge facts on addition and subtraction to tackle worded problems.</p> <p><b>Key Skills and Knowledge:</b></p> <ul style="list-style-type: none"> <li>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</li> <li>show that addition of two numbers can</li> </ul>	<p><b>Topic:</b> Calculations/ multiplication and division. Measure and accuracy-Time Working in 2d/3d.</p> <p><b>Suggested Key Questions:</b> Can you confidently use some basic knowledge facts on multiplication and division.</p> <p><b>Key Skills and Knowledge:</b></p> <ul style="list-style-type: none"> <li>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward</li> <li>recall and use multiplication</li> </ul>	<p><b>Topic:</b> Algebra Data and statistics Measure and accuracy- Angles and polygons Working in 2d/3d</p> <p><b>Suggested Key Questions:</b> Can you confidently use some basic knowledge facts on algebra/statistics/angles and polygons?</p> <p><b>Key Skills and Knowledge:</b></p> <ul style="list-style-type: none"> <li>Collect like terms.</li> <li>interpret and construct simple</li> </ul>	<p><b>Topic:</b> Number Ratio/Probability/Sequence</p> <p><b>Suggested Key Questions:</b> Can you confidently use some basic knowledge facts on ratio and proportion?</p> <p><b>Key Skills and Knowledge:</b></p> <p>With greater confidence can you solve problems involving the four applications of maths</p> <ul style="list-style-type: none"> <li>Use ratio notation (reduction in simplest form).</li> </ul>	<p><b>Topic:</b> Calculation Fractions and decimals and percentages. Measure and accuracy.</p> <p><b>Suggested Key Questions:</b> Can you confidently use some basic knowledge facts on fraction, decimal and percentages?</p> <p><b>Can you simplify fractions?</b></p> <p><b>Key Skills and Knowledge:</b></p> <p>Reason mathematically Solve problems involving recognise, find, name and write fractions <math>1/3</math>, <math>1/4</math>, <math>2/4</math> and <math>3/4</math></p>	<p><b>Topic:</b> Measure and accuracy. weight/capacity/volume.</p> <p><b>Suggested Key Questions:</b> Can you confidently use some basic knowledge facts on measure with accuracy and read scales?</p> <p><b>Key Skills and Knowledge:</b></p> <p>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 order lengths, mass, volume/capacity and</p>

	<p>be done in any order (commutative) and subtraction of one number from another cannot</p> <ul style="list-style-type: none"> <li>• add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</li> <li>• estimate the answer to a calculation and use inverse operations to check answers</li> <li>• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li> <li>• write simple fractions e.g. <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> </ul> <p>Can you Develop fluency</p>	<p>and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <ul style="list-style-type: none"> <li>• show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>• Plot scatter graphs for pairs of data values. Interpret given lines of best fit for points on a given scatter graph.</li> <li>• Order small list of numbers (up to ten numbers) to identify middle value (median).</li> </ul>	<ul style="list-style-type: none"> <li>• Write a ratio in its simplest form and divide a quantity in a given ratio.</li> </ul>	<p>4 of a length, shape, set of objects or quantity</p>	<p>record the results using &gt;, &lt; and =</p>
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<p>Links to Gatsby Benchmarks:</p>	<p><b><u>Benchmark 2</u></b> Labour market to information. What are the current trends in the jobs market that involve maths skills that students are learning.</p> <p><b><u>Benchmark 4.</u></b> STEM opportunities-linking career opportunities and what aspects of mathematics they are learning.</p>	<p><b><u>Benchmark 2</u></b> Labour market to information. What are the current trends in the jobs market that involve maths skills that students are learning.</p> <p><b><u>Benchmark 4.</u></b> STEM opportunities-linking career opportunities and what aspects of mathematics they are learning.</p>	<p><b><u>Benchmark 2</u></b> Labour market to information. What are the current trends in the jobs market that involve maths skills that students are learning.</p> <p><b><u>Benchmark 4.</u></b> STEM opportunities-linking career opportunities and what aspects of mathematics they are learning.</p>	<p><b><u>Benchmark 2</u></b> Labour market to information. What are the current trends in the jobs market that involve maths skills that students are learning.</p> <p><b><u>Benchmark 4.</u></b> STEM opportunities-linking career opportunities and what aspects of mathematics they are learning.</p>	<p><b><u>Benchmark 2</u></b> Labour market to information. What are the current trends in the jobs market that involve maths skills that students are learning.</p> <p><b><u>Benchmark 4.</u></b> STEM opportunities-linking career opportunities and what aspects of mathematics they are learning.</p>	<p><b><u>Benchmark 2</u></b> Labour market to information. What are the current trends in the jobs market that involve maths skills that students are learning.</p> <p><b><u>Benchmark 4.</u></b> STEM opportunities-linking career opportunities and what aspects of mathematics they are learning.</p>