



# Maths – Year 4



<u>Honesty</u>		<u>Love</u>	<u>Forgiveness</u>	<u>Respect</u>	<u>Cultural Capital Opportunities</u>		
A Love Of Language <u>Reading:</u>  <u>Listening:</u>  <u>Speaking:</u>  <u>Writing:</u>		<u>Aspirations</u>  Which jobs could this concept be applied to?  Which areas of maths do we need for jobs which we would like to have?	<u>Bringing Learning To Life</u>  Ratio – cooking Pie charts – using data from P.E Using real life context in learning Money Timetables – transition for high school	<u>Emotional Well-Being</u>	<u>Resilience</u>  Knowing that not every concept will be learned quickly or easily  To attempt a problem through more than one strategy will help to understand the problem.	<u>Valuing Our Diversity</u>  Everyone has a different skill / interest in different areas of maths.	<u>Respect and Responsibility</u>  In order to gain success in life we need to have simple maths skills.  To be responsible for money and information which is shared.
What will they learn?			In what order?			End points	
Key Concepts	Key Skills	Autumn	Spring	Summer			

<p>To know and use numbers</p> <p>To add and subtract</p> <p>To multiply and divide</p> <p>To use fractions</p> <p>To understand the properties of shape</p> <p>To describe position, direction and movement</p> <p>To use measures</p> <p>To use statistics</p>	<p><b>To know and use numbers :</b></p> <p><b>Daily diet of :</b>  <b>Representing</b>  <b>Comparing</b>  <b>Place value</b>  <b>Solving problems</b>  <b>Complexity</b>  <b>Methods</b>  <b>Checking</b>  <b>Using number facts</b></p>	<ul style="list-style-type: none"> <li>Count in multiples of 6, 7, 9, 25 and 1000.</li> <li>Recognise the place value of each digit in a four digit number</li> <li>identify, represent and estimate numbers using different representations</li> <li>Read and write numbers to at least 10,000.</li> <li>Find 1000 more or less than a given number.</li> <li>Order and compare numbers beyond 1000</li> <li>Round any number to the nearest 10, 100 or 1000</li> </ul>	<p>Previous plus +</p> <ul style="list-style-type: none"> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>Recall and use multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</li> <li>Count backwards through zero to include negative numbers.</li> <li></li> </ul>	<p>Previous plus +</p> <ul style="list-style-type: none"> <li>Read Roman numerals to 100</li> </ul>	
	<p><b>Multiplication and division</b></p>	<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication</li> </ul>	<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication</li> </ul>	<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>	

		<p>tables up to <math>12 \times 12</math></p> <ul style="list-style-type: none"> <li>• Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</li> <li>• Recognise and use factor pairs and commutativity in mental calculations.</li> </ul>	<p>tables up to <math>12 \times 12</math></p> <ul style="list-style-type: none"> <li>• Multiply two digit and three digit numbers by a one digit number using formal written layout.</li> <li>• Recognise and use factor pairs and commutativity in mental calculations.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>	
	<b>To add and subtract</b>	<ul style="list-style-type: none"> <li>• Add and subtract mentally combinations of two and three digit numbers.</li> <li>• Add and subtract numbers with up to 4 digits using the formal written methods</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers with up to 4 digits using the formal written methods</li> <li>• Estimate and use inverse operations to check answers to a calculation.</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers with up to 4 digits using the formal written methods</li> <li>• Estimate and use inverse operations to check answers to a calculation.</li> </ul>	<u>Summer:</u>

		<ul style="list-style-type: none"> <li>• Estimate and use inverse operations to check answers to a calculation.</li> </ul>	<ul style="list-style-type: none"> <li>• solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	<ul style="list-style-type: none"> <li>• solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>	
	<b>To use fractions</b>	<ul style="list-style-type: none"> <li>• Recognise and show, using diagrams, families of common equivalent fractions.</li> <li>• Recognise and write decimal equivalents of any number of tenths or hundredths.</li> <li>• Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> <li>• round decimals with one decimal place to the nearest whole number</li> </ul>	<ul style="list-style-type: none"> <li>• Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>• Recognise and write decimal equivalents of any number of 10<sup>th</sup> or 100<sup>ths</sup>.</li> <li>• Recognise and write decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math> and <math>\frac{3}{4}</math>.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise and show, using diagrams, families of common equivalent fractions.</li> <li>• Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> <li>• solve problems involving increasingly harder fractions to calculate quantities, and fractions to</li> </ul>	

		<ul style="list-style-type: none"> <li>compare numbers with the same number of decimal places up to two decimal places</li> </ul>		<p>divide quantities, including non-unit fractions where the answer is a whole number</p>	
	<b>To describe position, direction and movement</b>	<ul style="list-style-type: none"> <li>Describe positions on a 2-D grid as coordinates in the first quadrant.</li> </ul>	<ul style="list-style-type: none"> <li>Describe movements between positions as translations of a given unit to the left/ right and up/ down.</li> </ul>	<ul style="list-style-type: none"> <li>Plot specified points and draw sides to complete a given polygon.</li> </ul>	
	<b>To use measures</b>	<ul style="list-style-type: none"> <li>Time Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>Find the area of rectilinear shapes by counting squares.</li> </ul>	<ul style="list-style-type: none"> <li>Read, write and convert time between analogue and digital 12- and 24-hour clocks.</li> <li>Read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>Solve problems involving converting from</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> <li>Convert between different units of measure [for example, kilometre to metre]</li> </ul>	

			<p>hours to minutes; minutes to seconds; years to months; weeks to days.</p> <ul style="list-style-type: none"> <li>• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <li>• Estimate, compare and calculate different measures, including money in pounds and pence.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve simple measure and money problems involving fractions and decimals to two decimal places</li> </ul>	
	<b>To use statistics</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul>	

	<b>To understand the properties of shape</b>	<ul style="list-style-type: none"><li>• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</li></ul>	<ul style="list-style-type: none"><li>• Identify acute and obtuse angles and compare and order angles up to two right angles by size.</li></ul>	<ul style="list-style-type: none"><li>• Identify lines of symmetry in 2-D shapes presented in different orientations.</li><li>• Complete a simple symmetric figure with respect to a specific line of symmetry.</li></ul>	
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