



# Maths – Year 3



<u>Honesty</u> Getting something wrong or not understanding something is part of maths		<u>Love</u> Enjoying maths as part of learning	<u>Forgiveness</u> Knowing that making mistakes is part of learning	<u>Respect</u> Knowing that subjects can be tricky.	<u>Cultural Capital Opportunities</u>		
<u>A Love Of Language</u> <u>Reading:</u> reading problems in maths, reading new vocabulary  <u>Listening:</u> listening to patterns, rhymes and songs in maths  <u>Speaking:</u> comparing and talking about maths I can see  <u>Writing:</u> recording the maths I have completed.		<u>Aspirations</u> Doctors Teachers Architects etc  We need maths in everyday at some point	<u>Bringing Learning To Life</u>  Using concrete resources Practical / active maths	<u>Emotional Well-Being</u>  Knowing that learning maths can improve our skills in other subjects.	<u>Resilience</u>  Knowing that making mistakes is ok, we can go back and change the work we have completed if we have a mistake.	<u>Valuing Our Diversity</u>  Understanding that there are maths in different context and concepts and we may be better at other areas.	<u>Respect and Responsibility</u>  .Coaching peers through tricky sections  Knowing not to laugh at mistakes  Using presentation promise in work
What will they learn?			In what order?				
Key Concepts	Key Skills	Autumn	Spring	Summer	End points		

<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>Identify, represent and estimate numbers using different representations.</li> <li>Find 10 or 100 more or less than a given number</li> <li>Recognise the place value of each digit in a three-digit number (HTO)</li> <li>Compare and order numbers up to 1000</li> <li>Read and write numbers up to 1000 in numerals and in words.</li> <li>Count from 0 in multiples of 4, 8, 50 and 100</li> </ul>	<ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</li> <li>Count from 0 in multiples from 1-12.</li> </ul>	<ul style="list-style-type: none"> <li>Count from 0 in multiples of 4, 8, 50 and 100</li> <li>solve number problems and practical problems involving these ideas.</li> </ul>	
	<p><b>Multiplication and division</b></p>	<ul style="list-style-type: none"> <li>recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</li> </ul>	<ul style="list-style-type: none"> <li>write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and</li> </ul>	<ul style="list-style-type: none"> <li>solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</li> </ul>	

			progressing to formal written methods		
	<b>To add and subtract</b>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally.</li> <li>• Add and subtract numbers mentally, including a 3-digit number : a three-digit number and ones;</li> <li>• Estimate the answer to a calculation and use inverse operations to check answers</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three digit number and hundreds.</li> <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> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three digit number and hundreds.</li> <li>• Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</li> <li>• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</li> <li>• Add and subtract amounts of money to give change, using both pounds and pence in practical contexts.</li> <li>• Add and subtract fractions with the</li> </ul>	<u>Summer:</u>

				<p>same denominator within 1 whole (for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>).</p> <ul style="list-style-type: none"> <li>• Estimate the answer to a calculation and use inverse operations to check answers</li> <li>• Add and subtract amounts of money to give change, using both £ and p in practical contexts</li> </ul>	
	<b>To use fractions</b>	<ul style="list-style-type: none"> <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>• Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10</li> <li>• Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</li> <li>• Recognise and show, using diagrams, equivalent fractions with small denominators.</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</li> <li>• Solve problems involving fractions.</li> </ul>	

	<b>To use measures</b>	<ul style="list-style-type: none"> <li>• Compare durations of events [for example to calculate the time taken by particular events or tasks].\</li> <li>• Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimate and read time with increasing accuracy to the nearest minute.</li> <li>• Record and compare time in terms of seconds, minutes and hours.</li> <li>• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li> <li>• measure the perimeter of simple 2-D shapes</li> </ul>	<ul style="list-style-type: none"> <li>• Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24-hour clocks.</li> <li>• Know the number of seconds in a minute and the number of days in each month, year and leap year.</li> <li>• add and subtract amounts of money to give change, using both £ and p in practical contexts</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 data using bar charts, pictograms and tables.</li> </ul>	<ul style="list-style-type: none"> <li>• Interpret and present data using bar charts, pictograms and tables.</li> <li>• Solve one-step and two-step questions</li> </ul>	

	<p><b>To understand the properties of shape</b></p>	<ul style="list-style-type: none"> <li>• Recognise and name 2D and 3D shapes</li> <li>• Recognise 3-D shapes in different orientations and describe them.</li> <li>• Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw 2-D shapes and make 3D shapes using modelling materials.</li> <li>• Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> <li>• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</li> <li>• Measure the perimeter of simple 2D shapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise angles as a property of 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 than or less than a right angle.</li> </ul>	
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