

**Trimley St Mary Primary School – Maths Long Term Plan - Year 5**

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Autumn Term</b>	<b>Number</b> <b>Place value</b>			<b>Number</b> <b>Addition &amp; Subtraction</b>		<b>Number</b> <b>Multiplication &amp; Division A</b>			<b>Number</b> <b>Fractions</b>			
	<ul style="list-style-type: none"> <li>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</li> <li>count forwards and backwards with positive and negative whole numbers, including through zero</li> <li>read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit</li> <li>read Roman numerals to 1000 (M) and recognise years written in Roman numerals</li> <li>(read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit</li> <li>interpret negative numbers in context</li> <li>round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</li> <li>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0</li> <li>solve number problems and practical problems that involve all of the above</li> </ul>			<ul style="list-style-type: none"> <li>add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</li> <li>add and subtract numbers mentally with increasingly large numbers</li> <li>solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why</li> <li>solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</li> <li>use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</li> </ul>		<ul style="list-style-type: none"> <li>identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</li> <li>know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers</li> <li>establish whether a number up to 100 is prime and recall prime numbers up to 19</li> <li>recognise and use square numbers and cube numbers, and the notation for squared (2 ) and cubed (3 )</li> <li>multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers</li> <li>multiply and divide numbers mentally drawing upon known facts</li> <li>divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context</li> <li>multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</li> <li>solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes</li> <li>solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</li> </ul>			<ul style="list-style-type: none"> <li>identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</li> <li>recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number [for example, <math>2/5 + 4/5 = 6/5 = 1 \frac{1}{5}</math>]</li> <li>compare and order fractions whose denominators are all multiples of the same number</li> <li>add and subtract fractions with the same denominator and denominators that are multiples of the same number</li> <li>multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> </ul>			
<b>Spring Term</b>	<b>Number</b> <b>Multiplication &amp; Division A</b>			<b>Number</b> <b>Fractions</b>		<b>Number</b> <b>Decimals &amp; Percentages</b>			<b>Measurement</b> <b>Perimeter &amp; Area</b>		<b>Statistics</b>	
	<ul style="list-style-type: none"> <li>multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers</li> </ul>			<ul style="list-style-type: none"> <li>compare and order fractions whole</li> <li>add and subtract fractions with the same denominator and</li> </ul>		<ul style="list-style-type: none"> <li>read and write decimal numbers as fractions [for example, <math>0.71 = 71/100</math> ]</li> <li>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</li> </ul>			<ul style="list-style-type: none"> <li>convert between different units of metric measure</li> <li>understand and use approximate equivalences between metric units and</li> </ul>		<ul style="list-style-type: none"> <li>complete, read and interpret information in tables, including timetables</li> <li>solve comparison, sum and difference problems using</li> </ul>	

	<ul style="list-style-type: none"> <li>multiply and divide numbers mentally drawing upon known facts</li> <li>divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context</li> <li>multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</li> <li>solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes</li> <li>solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</li> <li>solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</li> </ul>	<p>denominators that are multiples of the same number</p> <ul style="list-style-type: none"> <li>multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> </ul>	<ul style="list-style-type: none"> <li>round decimals with two decimal places to the nearest whole number and to one decimal place</li> <li>read, write, order and compare numbers with up to three decimal places</li> <li>recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal</li> <li>solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25</li> </ul>	<p>common imperial units such as inches, pounds and pints</p> <ul style="list-style-type: none"> <li>use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling</li> <li>measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</li> <li>calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes</li> <li>estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]</li> </ul>	<p>information presented in a line graph</p>	
<b>Summer Term</b>	<p><b><u>Geometry</u></b> <b><u>Shape</u></b></p> <ul style="list-style-type: none"> <li>distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> <li>use the properties of rectangles to deduce related facts and find missing lengths and angles</li> <li>identify 3-D shapes, including cubes and other cuboids, from 2-D representations</li> </ul>	<p><b><u>Geometry</u></b> <b><u>Position &amp; Direction</u></b></p> <p>know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <ul style="list-style-type: none"> <li>draw given angles, and measure them in degrees</li> <li>identify: <ul style="list-style-type: none"> <li>angles at a point and one whole turn (total 360°)</li> <li>angles at a point on a straight line and 1 2 a turn (total 180°)</li> <li>other multiples of 90°</li> </ul> </li> <li>identify, describe and represent the position of a shape following a</li> </ul>	<p><b><u>Number</u></b> <b><u>Decimals</u></b></p> <ul style="list-style-type: none"> <li>read and write decimal numbers as fractions [for example, 0.71 = 71/100]</li> <li>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</li> <li>round decimals with two decimal places to the nearest whole number and to one decimal place</li> <li>read, write, order and compare numbers with up to three decimal places</li> <li>use all four operations to solve problems involving measure [for example, money]</li> </ul>	<p><b><u>Number</u></b> <b><u>Negative Numbers</u></b></p> <ul style="list-style-type: none"> <li>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</li> <li>count forwards and backwards with positive and negative whole numbers,</li> </ul>	<p><b><u>Measurement</u></b> <b><u>Converting units</u></b></p> <ul style="list-style-type: none"> <li>convert between different units of metric measure</li> <li>understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</li> <li>use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling</li> <li>solve problems involving converting between units of time</li> </ul>	<p><b><u>Measurement</u></b> <b><u>Volume</u></b></p> <ul style="list-style-type: none"> <li>convert between different units of metric measure</li> <li>understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</li> <li>use all four operations to</li> </ul>

		reflection or translation, using the appropriate language, and know that the shape has not changed		including through zero		solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling <ul style="list-style-type: none"><li>• measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</li><li>• calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes</li><li>• estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]</li></ul>
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