



Mathematics Key Stage 2 Year 4		
Pupils will be taught:		Key Performance Indicators (KPIS)
Programmes of study	Content – National Curriculum	Pupils will be expected to show evidence of achievement against the KPIS
Number – number and place value	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>count in multiples of 6, 7, 9, 25 and 1000</li> <li>find 1000 more or less than a given number</li> <li>count backwards through zero to include negative numbers</li> <li>recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>order and compare numbers beyond 1000</li> <li>identify, represent and estimate numbers using different representations</li> <li>round any number to the nearest 10, 100 or 1000</li> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</li> </ul>	<p>Pupils can...</p> <ul style="list-style-type: none"> <li>Count in multiples of 6, 7, 9, 25 and 1000.</li> <li>Count backwards through zero to include negative numbers.</li> <li>Order and compare numbers beyond 1000.</li> <li>Round any number to the nearest 10, 100 or 1000.</li> </ul>
Number – addition and subtraction	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<p>Pupils can...</p> <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>
Number – multiplication and division	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>recall multiplication and division facts of multiplication tables up to 12 x 12</li> <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>recognize and use factor pairs and commutativity in mental calculations</li> <li>multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> </ul>	<p>Pupils can...</p> <ul style="list-style-type: none"> <li>Recall multiplication and division facts of multiplication tables up to 12 x 12.</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>	
<p><b>Number - fractions (including decimals)</b></p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• recognise and show, using diagrams, families of common equivalent fractions</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>• solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</li> <li>• add and subtract fractions with the same denominator</li> <li>• recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>• recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math></li> <li>▪ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>▪ round decimals with one decimal place to the nearest whole number</li> <li>▪ compare numbers with the same number of decimal places up to two decimal places</li> <li>▪ solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul>	<p>Pupils can...</p> <ul style="list-style-type: none"> <li>• Recognise and show, using diagrams, families of common equivalent fractions.</li> <li>• Count up and down in hundredths.</li> <li>• Recognize 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> <li>• Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul>



<p><b>Measurement</b></p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>convert between different units of measure (kilometer to metre: hour to minute)</li> <li>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <li>find the area of rectilinear shapes by counting squares</li> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> <li>read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>Solve problems involving converting from hours to minutes: minutes to seconds: years to months: weeks to days.</li> </ul>	<p>Pupils can...</p> <ul style="list-style-type: none"> <li>Convert between different units of measure (kilometer to metre: hour to minute).</li> </ul>
<p><b>Geometry - properties of shapes</b></p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>compare and classify geometric shapes, using the language of orientation, including quadrilaterals and triangles, based on their properties and sizes</li> <li>identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <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>	<p>Pupils can...</p> <ul style="list-style-type: none"> <li>Compare and classify geometric shapes, using the language of orientation, including quadrilaterals and triangles, based on their properties and sizes.</li> <li>Identify lines of symmetry in 2-D shapes presented in different orientations.</li> </ul>
<p><b>Geometry - position and direction</b></p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>plot specified points and draw sides to complete a given polygon.</li> </ul>	<p>Pupils can...</p> <ul style="list-style-type: none"> <li>Plot specified points and draw sides to complete a given polygon.</li> </ul>
<p><b>Statistics</b></p>	<p>Pupils should be taught to:</p> <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>	<p>Pupils can...</p> <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>



Loving minds hearts hands

*In God's family we grow and learn in love, hope and faith*

	<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>	
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