

Year 4 Maths Curriculum

Week	Term 1	Term 2	Term 3
1	<p><b>Number – Place Value</b></p> <p>Count in multiples of 6 and 1000</p> <p>Find 1000 more or less than a given number</p> <p>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p>Identify, represent and estimate numbers using different representations</p> <p>Solve number and practical problems that involve all of the above and with increasingly large positive numbers</p> <p><i>Using a variety of representations, including measures, pupils become fluent in the order and place value of numbers beyond 1000, including counting in tens and hundreds, and maintaining fluency in other multiples through varied and frequent practice.</i></p> <p><i>They begin to extend their knowledge of the number system to include the decimal numbers and fractions that they have met so far.</i></p> <p><i>They connect estimation and rounding numbers to the use of measuring instruments.</i></p>	<p><b>Number – Place Value</b></p> <p>Count in multiples of 6, <b>9, 25</b> and 1000</p> <p>Count backwards through zero to include negative numbers</p> <p>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p>Order and compare numbers beyond 1000</p> <p>Solve number and practical problems that involve all of the above and with increasingly large positive numbers</p> <p><i>Using a variety of representations, including measures, pupils become fluent in the order and place value of numbers beyond 1000, including counting in tens and hundreds, and maintaining fluency in other multiples through varied and frequent practice.</i></p> <p><i>They begin to extend their knowledge of the number system to include the decimal numbers and fractions that they have met so far.</i></p>	<p><b>Number – Place Value</b></p> <p>Count in multiples of 6, <b>7, 9, 25</b> and 1000</p> <p>Count backwards through zero to include negative numbers</p> <p>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</p> <p>Round any number to the nearest 10, 100 or 1000</p> <p>Solve number and practical problems that involve all of the above and with increasingly large positive numbers</p> <p><i>a variety of representations, including measures, pupils become fluent in the order and place value of numbers beyond 1000, including counting in tens and hundreds, and maintaining fluency in other multiples through varied and frequent practice.</i></p> <p><i>They begin to extend their knowledge of the number system to include the decimal numbers and fractions that they have met so far.</i></p> <p><i>They connect estimation and rounding numbers to the use of measuring instruments.</i></p> <p>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. <i>Roman numerals should be put in their historical context so pupils understand that there have been different ways to write whole numbers and that the important concepts of zero and place value were introduced over a period of time.</i></p>

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2	<p><b>Addition</b></p> <p>Add numbers mentally including</p> <ul style="list-style-type: none"> <li>- a three-digit number and ones</li> <li>- a three-digit number and tens</li> </ul> <p><i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Add numbers with <b>up to 3</b> digits using the formal written methods of columnar addition where appropriate (<b>also continue to practise and reinforce partitioning</b>)</p> <p>Estimate and use inverse operations to check answers to a calculation</p> <p><i>Pupils continue to practise both mental methods and columnar addition with increasingly large numbers to aid fluency (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Addition</b></p> <p>Add numbers mentally including</p> <ul style="list-style-type: none"> <li>- a three-digit number and tens</li> <li>- a three-digit number and hundreds</li> </ul> <p><i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Add numbers with <b>up to 4</b> digits using the formal written methods of columnar addition where appropriate (<b>also continue to practise and reinforce partitioning</b>)</p> <p>Estimate and use inverse operations to check answers to a calculation</p> <p><i>Pupils continue to practise both mental methods and columnar addition with increasingly large numbers to aid fluency (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Addition</b></p> <p>Add numbers mentally including</p> <ul style="list-style-type: none"> <li>-a three digit number and hundreds</li> <li>-a four digit number and ones</li> </ul> <p><i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Add numbers with <b>up to 4</b> digits using the formal written methods of columnar addition where appropriate (<b>also continue to practise and reinforce partitioning</b>)</p> <p>Estimate and use inverse operations to check answers to a calculation</p> <p><i>Pupils continue to practise both mental methods and columnar addition with increasingly large numbers to aid fluency (see <a href="#">Mathematics Appendix 1</a>).</i></p>
3	<p><b>Subtraction</b></p> <p>Subtract numbers mentally including:</p> <ul style="list-style-type: none"> <li>- a three-digit number and ones</li> <li>-a three-digit number and tens</li> <li>-a three-digit number and hundreds</li> </ul> <p>Subtract numbers with <b>up to 3</b> digits using the formal written methods of columnar subtraction where appropriate (<b>also continue to use the number line</b>)</p> <p>Estimate and use inverse operations to check answers to a calculation</p> <p><i>Pupils continue to practise both mental methods and columnar subtraction with increasingly large numbers to aid fluency (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Subtraction</b></p> <p>Subtract numbers mentally including:</p> <ul style="list-style-type: none"> <li>-a four digit number and ones</li> </ul> <p>Subtract numbers with <b>up to 4</b> digits using the formal written methods of columnar subtraction where appropriate (<b>also continue to use the number line</b>)</p> <p>Estimate and use inverse operations to check answers to a calculation</p> <p><i>Pupils continue to practise both mental methods and columnar subtraction with increasingly large numbers to aid fluency (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Subtraction</b></p> <p>Subtract numbers mentally including:</p> <ul style="list-style-type: none"> <li>-a four digit number and ones</li> <li>-a four digit number and tens</li> </ul> <p>Subtract numbers with <b>up to 4</b> digits using the formal written methods of columnar subtraction where appropriate (<b>also continue to use the number line</b>)</p> <p>Estimate and use inverse operations to check answers to a calculation</p> <p><i>Pupils continue to practise both mental methods and columnar subtraction with increasingly large numbers to aid fluency (see <a href="#">Mathematics Appendix 1</a>).</i></p>

Week	Term 1	Term 2	Term 3
4	<p><b>Addition and Subtraction</b></p> <p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p><b>Addition and Subtraction</b></p> <p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p><b>Addition and Subtraction</b></p> <p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>
5	<p><b>Geometry – Shape</b></p> <p>Identify lines of symmetry in 2-D shapes presented in different orientations</p> <p>Complete a simple symmetric figure with respect to a specific line of symmetry.</p> <p><i>Pupils draw symmetric patterns using a variety of media to become familiar with different orientations of lines of symmetry; and recognise line symmetry in a variety of diagrams, including where the line of symmetry does not dissect the original shape.</i></p>	<p><b>Geometry – Shape</b></p> <p>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p> <p><i>Pupils continue to classify shapes using geometrical properties, extending to classifying different triangles (for example, isosceles, equilateral, scalene) and quadrilaterals (for example, parallelogram, rhombus, trapezium).</i></p>	<p><b>Geometry – Shape</b></p> <p>Identify acute and obtuse angles and compare and order angles up to two right angles by size</p> <p><i>Pupils compare and order angles in preparation for using a protractor and compare lengths and angles to decide if a polygon is regular or irregular.</i></p>
6	<p><b>Measurement - Units</b></p> <p>Convert between different units of measure [for example, kilometre to metre; hour to minute]</p> <p>Estimate, compare and calculate different measures, including money in pounds and pence</p> <p><i>Pupils build on their understanding of place value and decimal notation to record metric measures, including money. They use multiplication to convert from larger to smaller units</i></p>	<p><b>Measurement – Time</b></p> <p>Read, write and convert time between analogue and digital 12- and 24-hour clocks</p> <p>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</p> <p><i>Pupils build on their understanding of place value and decimal notation to record metric measures, including money. They use multiplication to convert from larger to smaller units.</i></p>	<p><b>Measurement – Area &amp; Perimeter</b></p> <p>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p><i>Perimeter can be expressed algebraically as <math>2(a + b)</math> where <math>a</math> and <math>b</math> are the dimensions in the same unit.</i></p> <p>Find the area of rectilinear shapes by counting squares</p> <p><i>They relate area to arrays and multiplication.</i></p>

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7	<p><b>Multiplication</b></p> <p>Recall multiplication and division facts for <b>9x</b> multiplication table (Revise 2, 3, 4, 5, 6, 7, 8, 10- from Y2 &amp;Y3) <i>Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.</i></p> <p>Use place value, known and derived facts to multiply mentally including: multiplying by 0 and 1 <i>Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example <math>600 \div 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>).</i></p> <p>Multiply two-digit numbers by a one-digit number using formal written layout <i>Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Multiplication</b></p> <p>Recall multiplication and division facts for multiplication tables 11x and 12x <i>Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.</i></p> <p>Use place value, known and derived facts to multiply mentally, including: multiplying together three numbers <i>Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example <math>600 \div 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>).</i></p> <p>Multiply two-digit <b>and three digit</b> numbers by a one-digit number using formal written layout <i>Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Multiplication</b></p> <p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math> <i>Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.</i></p> <p>Recognise and use factor pairs and commutativity in mental calculations <i>Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example <math>600 \div 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>).</i></p> <p>Multiply two-digit and three-digit numbers by a one-digit number using formal written layout <i>Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see <a href="#">Mathematics Appendix 1</a>).</i></p>
8	<p><b>Division</b></p> <p>Recall multiplication and division facts for 9x multiplication table (Revise 2, 3, 4, 5, 6, 7, 8, 10- from Y2 &amp;Y3) <i>Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.</i></p> <p>Use place value, known and derived facts to divide mentally, including: dividing by 1 <i>Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example <math>600 \div 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>).</i></p> <p><b>Build on Y3</b> -Write and calculate mathematical statements for division using the multiplication tables that they know including for two-digit numbers times one-digit numbers, using mental and progressing to formal written</p>	<p><b>Division</b></p> <p>Recall multiplication and division facts for multiplication tables 11x and 12x <i>Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.</i></p> <p>Recognise and use factor pairs and commutativity in mental calculations <i>Pupils practise mental methods and extend this to three-digit numbers to derive facts, (for example <math>600 \div 3 = 200</math> can be derived from <math>2 \times 3 = 6</math>).</i></p> <p><b>Build on Y3</b> -Write and calculate mathematical statements for division using the multiplication tables that they know including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p>	<p><b>Division</b></p> <p>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math> <i>Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.</i></p> <p><b>Build on Y3</b> -Write and calculate mathematical statements for division using the multiplication tables that they know including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods</p> <p><i>Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see <a href="#">Mathematics Appendix 1</a>).</i></p>

	<p>methods</p> <p><i>Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><i>Pupils practise to become fluent in the formal written method of short multiplication and short division with exact answers (see <a href="#">Mathematics Appendix 1</a>).</i></p>	
9	<p><b>Multiplication &amp; Division</b></p> <p>Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit.</p> <p><i>Pupils write statements about the equality of expressions (for example, use the distributive law <math>39 \times 7 = 30 \times 7 + 9 \times 7</math> and associative law <math>(2 \times 3) \times 4 = 2 \times (3 \times 4)</math>). They combine their knowledge of number facts and rules of arithmetic to solve mental and written calculations for example, <math>2 \times 6 \times 5 = 10 \times 6 = 60</math>.</i></p> <p><i>Pupils solve two-step problems in contexts, choosing the appropriate operation, working with increasingly harder numbers. This should include correspondence questions such as the numbers of choices of a meal on a menu, or three cakes shared equally between 10 children.</i></p>	<p><b>Multiplication &amp; Division</b></p> <p>Solve problems involving multiplying and adding, including using integer scaling problems.</p> <p><i>Pupils write statements about the equality of expressions (for example, use the distributive law <math>39 \times 7 = 30 \times 7 + 9 \times 7</math> and associative law <math>(2 \times 3) \times 4 = 2 \times (3 \times 4)</math>). They combine their knowledge of number facts and rules of arithmetic to solve mental and written calculations for example, <math>2 \times 6 \times 5 = 10 \times 6 = 60</math>.</i></p> <p><i>Pupils solve two-step problems in contexts, choosing the appropriate operation, working with increasingly harder numbers. This should include correspondence questions such as the numbers of choices of a meal on a menu, or three cakes shared equally between 10 children.</i></p>	<p><b>Multiplication &amp; Division</b></p> <p>Solve problems involving multiplying and adding, including harder correspondence problems such as n objects are connected to m objects.</p> <p><i>Pupils write statements about the equality of expressions (for example, use the distributive law <math>39 \times 7 = 30 \times 7 + 9 \times 7</math> and associative law <math>(2 \times 3) \times 4 = 2 \times (3 \times 4)</math>). They combine their knowledge of number facts and rules of arithmetic to solve mental and written calculations for example, <math>2 \times 6 \times 5 = 10 \times 6 = 60</math>.</i></p> <p><i>Pupils solve two-step problems in contexts, choosing the appropriate operation, working with increasingly harder numbers. This should include correspondence questions such as the numbers of choices of a meal on a menu, or three cakes shared equally between 10 children.</i></p>
10	<p><b>Fractions</b></p> <p>Recognise and show, using diagrams, families of common equivalent fractions</p> <p>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</p> <p><i>Pupils' understanding of the number system and decimal place value is extended at this stage to tenths and then hundredths. This includes relating the decimal notation to division of whole number by 10 and later 100.</i></p> <p>Recognise and write decimal equivalents of any number of</p>	<p><b>Fractions</b></p> <p>Add and subtract fractions with the same denominator</p> <p><i>Pupils continue to practise adding and subtracting fractions with the same denominator, to become fluent through a variety of increasingly complex problems beyond one whole.</i></p> <p>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</p> <p><i>Pupils' understanding of the number system and decimal place value is extended at this stage to tenths and then hundredths. This includes relating the decimal notation to division of whole</i></p>	<p><b>Fractions</b></p> <p>Round decimals with one decimal place to the nearest whole number</p> <p>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</p> <p>Solve simple measure and money problems involving fractions and decimals to two decimal places.</p>

	<p>tenths or hundredths</p> <p>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</p> <p><i>Pupils should connect hundredths to tenths and place value and decimal measure.</i></p> <p><i>They extend the use of the number line to connect fractions, numbers and measures.</i></p> <p><i>Pupils understand the relation between non-unit fractions and multiplication and division of quantities, with particular emphasis on tenths and hundredths.</i></p> <p><i>Pupils make connections between fractions of a length, of a shape and as a representation of one whole or set of quantities. Pupils use factors and multiples to recognise equivalent fractions and simplify where appropriate (for example, <math>\frac{2}{4} = \frac{1}{2}</math> or <math>\frac{3}{6} = \frac{1}{2}</math>).</i></p> <p><i>Pupils are taught throughout that decimals and fractions are different ways of expressing numbers and proportions.</i></p> <p><i>They practise counting using simple fractions and decimals, both forwards and backwards.</i></p> <p><i>Pupils learn decimal notation and the language associated with it, including in the context of measurements. They make comparisons and order decimal amounts and quantities that are expressed to the same number of decimal places. They should be able to represent numbers with one or two decimal places in several ways, such as on number lines.</i></p>	<p><i>number by 10 and later 100.</i></p> <p>Recognise and write decimal equivalents to <math>\frac{1}{4}</math> <math>\frac{1}{2}</math> <math>\frac{3}{4}</math></p> <p>Compare numbers with the same number of decimal places up to two decimal places</p>	
11	<p><b>Geometry- Position and Direction</b></p> <p>Describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>Describe movements between positions as translations of a given unit to the left/right and up/down</p> <p>Plot specified points and draw</p>	<p><b>Problem solving &amp; Measurement - Money</b></p> <p>Solve two-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Estimate, compare and calculate different measures, including money in pounds and pence</p> <p><i>Pupils build on their understanding</i></p>	<p><b>Geometry- Position and Direction</b></p> <p><b>Recap Term 1 and look at Y5 if necessary for extension</b></p> <p>Describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>Describe movements between positions as translations of a given unit to the left/right and up/down</p>

	<p>sides to complete a given polygon.</p> <p><i>Pupils draw a pair of axes in one quadrant, with equal scales and integer labels. They read, write and use pairs of coordinates, for example (2, 5), including using coordinate-plotting ICT tools.</i></p>	<p><i>of place value and decimal notation to record metric measures, including money.</i></p> <p><i>They use multiplication to convert from larger to smaller units.</i></p>	<p>Plot specified points and draw sides to complete a given polygon.</p> <p><i>Pupils draw a pair of axes in one quadrant, with equal scales and integer labels. They read, write and use pairs of coordinates, for example (2, 5), including using coordinate-plotting ICT tools.</i></p>
12	<p><b>Statistics</b> <b>Link to Science/Topic</b></p> <p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p> <p>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p> <p><i>Pupils understand and use a greater range of scales in their representations.</i></p> <p><i>Pupils begin to relate the graphical representation of data to recording change over time.</i></p>	<p><b>Statistics</b> <b>Link to Science/Topic</b></p> <p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p> <p>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p> <p><i>Pupils understand and use a greater range of scales in their representations.</i></p> <p><i>Pupils begin to relate the graphical representation of data to recording change over time.</i></p>	<p><b>Statistics</b> <b>Link to Science/Topic</b></p> <p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p> <p>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p> <p><i>Pupils understand and use a greater range of scales in their representations.</i></p> <p><i>Pupils begin to relate the graphical representation of data to recording change over time.</i></p>
13	<b>Assessment/Catch up week</b>	<b>Assessment/Catch up week</b>	<b>Assessment/Catch up week</b>