

Year 3 Maths Curriculum

Week	Term 1	Term 2	Term 3
1	<p><b>Number and Place Value</b></p> <p>Count from 0 in multiples of 4 Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <i>Pupils now use multiples of 2, 3, 4, 5, 10</i></p> <p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p> <p>Read and write numbers up to 100 in numerals and in words Compare and order numbers up to 1000</p> <p>Identify, represent and estimate numbers using different representations <i>Using a variety of representations, including those related to measure, pupils continue to count in ones, tens and hundreds, so that they become fluent in the order and place value of numbers to 1000.</i></p> <p>Solve number problems and practical problems involving these ideas. <i>They use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems, building on work in year 2 (for example, <math>146 = 100 + 40</math> and <math>6, 146 = 130 + 16</math>).</i></p>	<p><b>Number and Place Value</b></p> <p>Count from 0 in multiples of 4, <b>8</b>, and <b>100</b>; Find 10 more or less than a given number <i>Pupils now use multiples of 2, 3, 4, 5, 8, 10, and 100.</i></p> <p>Read and write numbers up to 500 in numerals and in words Compare and order numbers up to 1000</p> <p>Identify, represent and estimate numbers using different representations <i>Using a variety of representations, including those related to measure, pupils continue to count in ones, tens and hundreds, so that they become fluent in the order and place value of numbers to 1000.</i></p> <p>Solve number problems and practical problems involving these ideas. <i>They use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems, building on work in year 2 (for example, <math>146 = 100 + 40</math> and <math>6, 146 = 130 + 16</math>).</i></p>	<p><b>Number and Place Value</b></p> <p>Count from 0 in multiples of 4, 8, <b>50</b> and 100; Find 10 or <b>100</b> more or less than a given number <i>Pupils now use multiples of 2, 3, 4, 5, 8, 10, 50 and 100.</i></p> <p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p> <p>Read and write numbers up to 1000 in numerals and in words <i>Using a variety of representations, including those related to measure, pupils continue to count in ones, tens and hundreds, so that they become fluent in the order and place value of numbers to 1000.</i></p> <p>Focus mainly on: <b>Solve number problems and practical problems involving these ideas.</b> <i>They use larger numbers to at least 1000, applying partitioning related to place value using varied and increasingly complex problems, building on work in year 2 (for example, <math>146 = 100 + 40</math> and <math>6, 146 = 130 + 16</math>).</i></p>

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2	<p><b>Addition</b></p> <p>Add numbers mentally, including: - a three-digit number and ones <i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Add numbers with up to two digits, using formal written methods of columnar addition (<b>partitioning</b>)</p> <p><i>Pupils use their understanding of place value and partitioning, and practise using columnar addition with increasingly large numbers up to three digits to become fluent (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Addition</b></p> <p>Add numbers mentally, including: - a three-digit number and ones - <b>a three-digit number and tens</b> <i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Add numbers with up to three digits, using formal written methods of columnar addition (<b>partitioning</b>)</p> <p><i>Pupils use their understanding of place value and partitioning, and practise using columnar addition with increasingly large numbers up to three digits to become fluent (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Addition</b></p> <p>Add numbers mentally, including: -a three-digit number and ones - a three-digit number and tens - <b>a three-digit number and hundreds</b> <i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Add numbers with up to three digits, using formal written methods of columnar addition (<b>partitioned column</b>)</p> <p><i>Pupils use their understanding of place value and partitioning, and practise using columnar addition with increasingly large numbers up to three digits to become fluent (see <a href="#">Mathematics Appendix 1</a>).</i></p>
3	<p><b>Subtraction</b></p> <p>Subtract numbers mentally, including: -a three-digit number and ones <i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Subtract numbers with up to two digits, using formal written methods of columnar and subtraction (<b>number line</b>)</p> <p><i>Pupils use their understanding of place value and partitioning, and practise using columnar subtraction with increasingly large numbers up to three digits to become fluent (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Subtraction</b></p> <p>Subtract numbers mentally, including: - a three-digit number and ones -<b>a three-digit number and tens</b> <i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Subtract numbers with up to <b>three</b> digits, using formal written methods of columnar and subtraction (<b>number line</b>)</p> <p><i>Pupils use their understanding of place value and partitioning, and practise using columnar subtraction with increasingly large numbers up to three digits to become fluent (see <a href="#">Mathematics Appendix 1</a>).</i></p>	<p><b>Subtraction</b></p> <p>Subtract numbers mentally, including: - a three-digit number and ones -a three-digit number and tens -<b>a three-digit number and hundreds</b> <i>For mental calculations with two-digit numbers, the answers could exceed 100.</i></p> <p>Subtract numbers with up to three digits, using formal written methods of columnar and subtraction (<b>Number line and written counting on</b>)</p> <p><i>Pupils use their understanding of place value and partitioning, and practise using columnar subtraction with increasingly large numbers up to three digits to become fluent (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 problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p>Estimate the answer to a calculation and use inverse operations to check answers</p> <p><i>Pupils practise solving varied addition and subtraction questions.</i></p>	<p><b>Addition and Subtraction</b></p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p>Estimate the answer to a calculation and use inverse operations to check answers</p> <p><i>Pupils practise solving varied addition and subtraction questions.</i></p>	<p><b>Addition and Subtraction</b></p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p>Estimate the answer to a calculation and use inverse operations to check answers</p> <p><i>Pupils practise solving varied addition and subtraction questions.</i></p>
5	<p><b>Measurement- quantities</b></p> <p>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</p> <p><i>Pupils continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1 kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm).</i></p> <p><i>The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high) and this connects to multiplication.</i></p>	<p><b>Measurement - Money</b></p> <p>Add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p><i>Pupils continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately. The decimal recording of money is introduced formally in year 4.</i></p>	<p><b>Measurement - Money</b></p> <p>Add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p><i>Pupils continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately. The decimal recording of money is introduced formally in year 4.</i></p>
6	<p><b>Geometry - Shape</b></p> <p>Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p> <p><i>Pupils extend their use of the properties of shapes. They should be able to describe the properties of 2-D and 3-D shapes using accurate language.</i></p> <p><i>Pupils connect decimals and rounding to drawing and measuring straight lines in centimetres, in a variety of contexts.</i></p>	<p><b>Geometry - Position</b></p> <p>Recognise angles as a property of shape or a description of a turn</p> <p>- 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</p> <p><i>Pupils extend their use of the properties of shapes. They should be able to describe the properties of 2-D and 3-D shapes using accurate language, <b>including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.</b></i></p>	<p><b>Geometry - Shape</b></p> <p>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p> <p><i>Pupils' knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygons and polyhedra.</i></p>

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7	<p><b>Multiplication</b></p> <p>Recall and use multiplication and division facts for the 3 X multiplication table  <i>Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency</i></p> <p>Write and calculate mathematical statements for multiplication using the multiplication tables that they know (2, 3, 5, 10) including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  <i>Pupils develop reliable written methods for multiplication starting with calculations of two-digit numbers by one-digit numbers and progressing to the formal written methods of short multiplication.</i></p>	<p><b>Multiplication</b></p> <p>Recall and use multiplication and division facts for the 3 and <b>4</b> multiplication tables  <i>Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2 and 4 multiplication tables.</i></p> <p>Write and calculate mathematical statements for multiplication using the multiplication tables that they know (2, 3, <b>4</b>, 5, 10) including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  <i>Pupils develop reliable written methods for multiplication starting with calculations of two-digit numbers by one-digit numbers and progressing to the formal written methods of short multiplication.</i></p>	<p><b>Multiplication</b></p> <p>Recall and use multiplication and division facts for the 3, 4 and <b>8</b> multiplication tables  <i>Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2, 4 and 8 multiplication tables.</i></p> <p>Write and calculate mathematical statements for multiplication using the multiplication tables that they know (2, 3, 4, 5, <b>8</b>, 10) including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  <i>Pupils develop reliable written methods for multiplication starting with calculations of two-digit numbers by one-digit numbers and progressing to the formal written methods of short multiplication.</i></p>
8	<p><b>Division</b></p> <p>Recall and use multiplication and division facts for the 3 X multiplication table  <i>Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency.</i></p> <p>Write and calculate mathematical statements for division using the multiplication tables that they know (2, 3, 5, 10), including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  <i>Pupils develop efficient mental methods, for example, using multiplication and division facts (for example, using <math>3 \times 2 = 6</math>, <math>6 \div 3 = 2</math> and <math>2 = 6 \div 3</math>) to derive related facts (for example, <math>30 \times 2 = 60</math>, <math>60 \div 3 = 20</math> and <math>20 = 60 \div 3</math>).</i></p>	<p><b>Division</b></p> <p>Recall and use multiplication and division facts for the 3, <b>4</b> multiplication tables  <i>Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2 and 4 multiplication tables.</i></p> <p>Write and calculate mathematical statements for division using the multiplication tables that they know (2, 3, <b>4</b>, 5, 10), including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  <i>Pupils develop efficient mental methods, for example, using multiplication and division facts (for example, using <math>3 \times 2 = 6</math>, <math>6 \div 3 = 2</math> and <math>2 = 6 \div 3</math>) to derive related facts (for example, <math>30 \times 2 = 60</math>, <math>60 \div 3 = 20</math> and <math>20 = 60 \div 3</math>).</i></p>	<p><b>Division</b></p> <p>Recall and use multiplication and division facts for the 3, 4, <b>8</b> multiplication table  <i>Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2, 4 and 8 multiplication tables.</i></p> <p>Write and calculate mathematical statements for division using the multiplication tables that they know (2, 3, 4, 5, <b>8</b>, 10), including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  <i>Pupils develop efficient mental methods, for example, using commutativity and associativity (for example, <math>4 \times 12 \times 5 = 4 \times 5 \times 12 = 20 \times 12 = 240</math>)</i></p>

Week	Term 1	Term 2	Term 3
9	<p><b>Multiplication and Division</b></p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objects.</p> <p><i>Pupils solve simple problems in contexts, deciding which of the four operations to use and why. These include measuring and scaling contexts, (for example, four times as high, eight times as long etc.) and correspondence problems in which <math>m</math> objects are connected to <math>n</math> objects (for example, 3 hats and 4 coats, how many different outfits?; 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children).</i></p>	<p><b>Multiplication and Division</b></p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objects.</p> <p><i>Pupils solve simple problems in contexts, deciding which of the four operations to use and why. These include measuring and scaling contexts, (for example, four times as high, eight times as long etc.) and correspondence problems in which <math>m</math> objects are connected to <math>n</math> objects (for example, 3 hats and 4 coats, how many different outfits?; 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children).</i></p>	<p><b>Multiplication and Division</b></p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objects.</p> <p><i>Pupils solve simple problems in contexts, deciding which of the four operations to use and why. These include measuring and scaling contexts, (for example, four times as high, eight times as long etc.) and correspondence problems in which <math>m</math> objects are connected to <math>n</math> objects (for example, 3 hats and 4 coats, how many different outfits?; 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children).</i></p>
10	<p><b>Measurement – Time</b></p> <p>Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight</p> <p>Know the number of seconds in a minute and the number of days in each month, year and leap year</p> <p>Compare durations of events [for example to calculate the time taken by particular events or tasks].</p> <p><i>Pupils use both analogue and digital 12-hour clocks and record their times. In this way they become fluent in and prepared for using digital 24-hour clocks in year 4.</i></p>	<p><b>Measurement – Time</b></p> <p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p> <p>Compare durations of events [for example to calculate the time taken by particular events or tasks].</p> <p><i>Pupils use both analogue and digital 12-hour clocks and record their times. In this way they become fluent in and prepared for using digital 24-hour clocks in year 4.</i></p>	<p><b>Fractions</b></p> <p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p> <p><i>They continue to recognise fractions in the context of parts of a whole, numbers, measurements, a shape, and unit fractions as a division of a quantity.</i></p> <p>Pupils understand the relation between unit fractions as operators (fractions of), and division by integers.</p> <p>Add and subtract fractions with the same denominator within one whole (for example <math>5/7 + 1/7 = 6/7</math>)</p> <p><i>Pupils practise adding and subtracting fractions with the same denominator through a variety of increasingly complex problems to improve fluency.</i></p> <p>Solve problems that involve all of the above</p>

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11	<p><b>Fractions</b></p> <p>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 <i>Pupils connect tenths to place value, decimal measures and to division by 10.</i></p> <p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators <i>They continue to recognise fractions in the context of parts of a whole, numbers, measurements, a shape, and unit fractions as a division of a quantity.</i></p> <p>Solve problems that involve all of the above</p>	<p><b>Fractions</b></p> <p>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 <i>Pupils connect tenths to place value, decimal measures and to division by 10.</i></p> <p>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>Add and subtract fractions with the same denominator within one whole (for example <math>5/7 + 1/7 = 6/7</math>) <i>Pupils practise adding and subtracting fractions with the same denominator through a variety of increasingly complex problems to improve fluency.</i></p> <p>Solve problems that involve all of the above</p>	<p><b>Fractions</b></p> <p>Recognise and show, using diagrams, <b>equivalent</b> fractions with small denominators</p> <p>Compare and order unit fractions, and fractions with the same denominators <i>They begin to understand unit and non-unit fractions as numbers on the number line, and deduce relations between them, such as size and equivalence. They should go beyond the [0, 1] interval, including relating this to measure.</i></p> <p>Solve problems that involve all of the above</p>
12	<p><b>Measurement - perimeter</b></p> <p>Measure the perimeter of simple 2-D shapes <i>Pupils connect decimals and rounding to drawing and measuring straight lines in centimetres, in a variety of contexts.</i></p>	<p><b>Statistics</b></p> <p>Interpret and present data using bar charts, pictograms and tables</p> <p>Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables. <i>Pupils understand and use simple scales (for example, 2, 5, 10 units per cm) in pictograms and bar charts with increasing accuracy. They continue to interpret data presented in many contexts.</i></p>	<p><b>Statistics</b></p> <p>Interpret and present data using bar charts, pictograms and tables</p> <p>Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables. <i>Pupils understand and use simple scales (for example, 2, 5, 10 units per cm) in pictograms and bar charts with increasing accuracy. They continue to interpret data presented in many contexts.</i></p>
13	<b>Assessment / Catch up week</b>	<b>Assessment / Catch up week</b>	<b>Assessment / Catch up week</b>