

## Year 2 Maths Overview - 2024- 2025

Documents for reference: The Primary National curriculum, NCETM and Number Sense Maths

	Autumn 1	Autumn 2	Spring 1 <b>Mental maths to be recorded in books</b>	Spring 2	Summer 1 <b>Prove its in books</b>	Summer 2
<b>Flashy facts</b>	<b>Review * Oral rehearsal * Pairs fluency *Recorded arithmetic *Variation</b>					
	<p style="text-align: center;">Facts and strategies across 10</p> <p style="text-align: center;">Achieving fluency in addition and subtraction facts across 10</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <p><b>Make Ten and Then...</b> Additions which cross the 10 boundary can be calculated by Making Ten' first, and then adding on the remaining amount (e.g. <math>8 + 6</math> can be calculated by thinking <math>8 + 2 = 10</math> and 4 more makes 14). The same strategy can be applied to subtractions through 10.</p> </div> <p style="text-align: center;">Doubles and near doubles</p> <div style="border: 1px solid black; padding: 2px;"> <p><b>Doubles and Near Doubles</b> Memorise doubles of numbers to 10, using a visual approach. Then use these known double facts to calculate near doubles and hidden doubles. Once we know <math>6 + 6 = 12</math> then <math>6 + 7</math> and <math>5 + 7</math> is easy.</p> </div>	<p>Addition and subtraction facts to 20 fluently and derive related facts up to 100</p> <p>Writing numerals to 100</p> <p>Counting forwards and backwards from any given number</p>	<p style="text-align: center;">Calculation strategies</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <p><b>Number Neighbours: Spot the Difference</b> Adjacent numbers have a difference of 1. Adjacent odds and evens have a difference of 2.</p> <p>Spot number neighbours (adjacent, odds or evens) to solve subtractions of adjacent numbers (e.g. <math>5 - 4 = 1</math>), of adjacent odds (e.g. <math>9 - 7 = 2</math>) or adjacent evens (e.g. <math>6 - 4 = 2</math>)</p> </div> <div style="border: 1px solid black; padding: 2px;"> <p><b>Two More, Two Less: Think Odds and Evens</b> If we add two to a number, we go from odd to next odd or even to next even. If we subtract two from a number, we go from odd to previous odd or even to previous even.</p> </div> <p style="text-align: center;">Halving</p>	<p style="text-align: center;">Practising strategy selection to promote efficient and flexible thinking</p> <div style="border: 1px solid black; padding: 2px; margin-top: 10px;"> <p style="text-align: center;">Adjust It</p> <p style="text-align: center;">+10</p> <p>Any addition and subtraction can be calculated by adjusting from a fact you know already, (e.g. <math>6 + 9</math> is one less than <math>6 + 10</math>).</p> </div>		
<b>Week 1</b>	<p><b>Number - number and place value</b></p> <p>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward ♣ recognise the place value of each digit in a two-digit number (tens, ones) ♣ identify, represent and estimate numbers using different representations, including the number line ♣ compare and order numbers from 0 up to 100; use and = signs ♣ read and write numbers to at least 100 in numerals and in</p>	<p><b>Number - addition</b></p> <p>solve problems with addition: ♣ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ♣ applying their increasing knowledge of mental and written methods ♣ recall and use addition to 20 fluently, and derive and use related facts</p>	<p><b>Number - multiplication</b></p> <p>recall and use multiplication for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ♣ calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (<math>\times</math>), and equals (=) signs ♣ show that multiplication of two</p>	<p><b>Measurement</b></p> <p>♣ compare and sequence intervals of time ♣ tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times ♣ know the number of minutes in an hour and the number of hours in a day.</p>	<p><b>Measurement</b></p> <p>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (<math>^{\circ}\text{C}</math>); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales,</p>	<p><b>Geometry - properties of shapes</b></p> <p>♣ identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line ♣ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces ♣ identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] ♣</p>

	<p>words ♣ use place value and number facts to solve problems.</p>	<p>up to 100 ♣ add numbers using concrete objects, pictorial representations, and mentally, including: ♣ a two-digit number and ones ♣ a two-digit number and tens ♣ two two-digit numbers ♣ adding three one-digit numbers ♣ one-digit numbers ♣ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot ♣ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>numbers can be done in any order (commutative) and division of one number by another cannot ♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>		<p>thermometers and measuring vessels ♣ compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and = ♣ recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value ♣ find different combinations of coins that equal the same amounts of money ♣ solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	<p>compare and sort common 2-D and 3-D shapes and everyday objects.</p>
<p><b>Week 2</b></p>	<p><b>Continue place value and start addition</b></p> <p>solve problems with addition: ♣ using concrete objects and pictorial representations, including those involving numbers, quantities and measures up to 20.</p> <p>♣ recall and use addition to 20 fluently, and derive and use related facts up to 20.</p>				<p><b>Number - fractions</b></p> <p>recognise, find, name and write fractions <math>\frac{3}{1}</math>, <math>\frac{4}{1}</math>, <math>\frac{4}{2}</math> and <math>\frac{4}{3}</math> of a length, shape, set of objects or quantity ♣ write simple fractions for example, <math>\frac{2}{1}</math> of <math>\frac{6}{3}</math> and recognise the equivalence of <math>\frac{4}{2}</math> and <math>\frac{2}{1}</math>.</p>	<p><b>Number - addition and subtraction</b></p> <p>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot ♣ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>

<p>Week 3</p>		<p><b>Number - subtraction</b>  solve problems with subtraction: ♣ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ♣ applying their increasing knowledge of mental and written methods ♣ recall subtraction facts to 20 fluently, and derive and use related facts up to 100 ♣ subtract numbers using concrete objects, pictorial representations, and mentally, including: ♣ a two-digit number and ones ♣ a two-digit number and tens ♣ two two-digit numbers</p>	<p><b>Number - division</b>  recall and use division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ♣ calculate mathematical statements for division within the multiplication tables and write them using division (<math>\div</math>) and equals (=) signs ♣ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot ♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>	<p><b>Number - subtraction</b>  solve problems with subtraction: ♣ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ♣ applying their increasing knowledge of mental and written methods ♣ recall subtraction facts to 20 fluently, and derive and use related facts up to 100 ♣ subtract numbers using concrete objects, pictorial representations, and mentally, including: ♣ a two-digit number and ones ♣ a two-digit number and tens ♣ two two-digit numbers</p>		<p><b>Number - subtraction</b>  solve problems with subtraction: ♣ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ♣ applying their increasing knowledge of mental and written methods ♣ recall subtraction facts to 20 fluently, and derive and use related facts up to 100 ♣ subtract numbers using concrete objects, pictorial representations, and mentally, including: ♣ a two-digit number and ones ♣ a two-digit number and tens ♣ two two-digit numbers</p>
<p>Week 4</p>	<p><b>Geometry - position and direction</b>  order and arrange combinations of mathematical objects in patterns and sequences ♣ use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).</p>				<p><b>Number - multiplication</b>  recall and use multiplication for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ♣ calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (<math>\times</math>), and equals (=) signs ♣ show that</p>	<p><b>Geometry - position and direction</b>  order and arrange combinations of mathematical objects in patterns and sequences ♣ use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).</p>

<p><b>Week 5</b></p>	<p><b>Geometry - properties of shapes</b></p> <ul style="list-style-type: none"> <li>♣ identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</li> <li>♣ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>♣ identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</li> <li>♣ compare and sort common 2-D and 3-D shapes and everyday objects.</li> </ul>			<p><b>Number - addition</b></p> <p>solve problems with addition: ♣ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ♣ applying their increasing knowledge of mental and written methods ♣ recall and use addition to 20 fluently, and derive and use related facts up to 100 ♣ add numbers using concrete objects, pictorial representations, and mentally, including: ♣ a two-digit number and ones ♣ a two-digit number and tens ♣ two two-digit numbers ♣ adding three one-digit numbers ♣ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot ♣ recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot ♣ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>	
<p><b>Week 6</b></p>	<p><b>Measurement</b></p> <ul style="list-style-type: none"> <li>♣ compare and sequence intervals of time ♣ tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times ♣ know the number of minutes in an hour and the number of hours in a day.</li> </ul>	<p><b>Statistics</b></p> <p>interpret and construct simple pictograms, tally charts, block diagrams and simple tables ♣ ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ♣ ask and answer questions about totalling and comparing categorical data.</p>	<p><b>Number - fractions</b></p> <p>recognise, find, name and write fractions <math>\frac{3}{1}</math>, <math>\frac{4}{1}</math>, <math>\frac{4}{2}</math> and <math>\frac{4}{3}</math> of a length, shape, set of objects or quantity ♣ write simple fractions for example, <math>\frac{2}{6}</math> of 6 = 3 and recognise the equivalence of <math>\frac{4}{2}</math> and <math>\frac{2}{1}</math>.</p>		<p><b>Number - division</b></p> <p>recall and use division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers ♣ calculate mathematical statements for division within the multiplication tables and write them using division (<math>\div</math>) and equals (=) signs ♣ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot ♣ solve problems involving</p>	<p><b>Interleaving opportunities</b></p>

					<p>multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>	
Week 7						

Interleaving opportunities/retrieval practice to be planned into the end of each half term - retrieval rockets, quick quizzes and prove its