

Year 2 Maths Long Term Plan

Autumn Term

|                     | Term 1   | Term 2   |   |
|---------------------|--|--|---|
| Unit Focus          | <b>Place Value (3 weeks) Addition and Subtraction (4 weeks)</b>  | <b>Addition and Subtraction (2 weeks)</b>  | <b>Measurement: Money (3 weeks), Time (1 weeks)</b> |
| Priority            | <ul style="list-style-type: none"> <li>• 2NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning.</li> <li>• 2NPV–2 Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10.</li> <li>• 2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice.</li> <li>• 2AS–1 Add and subtract across 10.</li> <li>• 2AS–2 Recognise the subtraction structure of ‘difference’ and answer questions of the form, “How many more...?”.</li> <li>• 2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two digit number.</li> </ul>  | <ul style="list-style-type: none"> <li>• 2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two digit numbers.</li> </ul>  |   |
| National Curriculum | <p><b>Place Value</b></p> <ul style="list-style-type: none"> <li>• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</li> <li>• recognise the place value of each digit in a two-digit number (tens, ones)</li> <li>• identify, represent and estimate numbers using different representations, including the number line</li> <li>• compare and order numbers from 0 up to 100; use and = signs</li> <li>• read and write numbers to at least 100 in numerals and in words</li> <li>• use place value and number facts to solve problems.</li> </ul> <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</li> <li>• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:                             <ul style="list-style-type: none"> <li>- a two-digit number and ones</li> <li>- a two-digit number and tens</li> <li>- two two-digit numbers</li> <li>- adding three one-digit numbers</li> </ul> </li> <li>• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> </ul> | <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>• recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</li> <li>• solve problems with addition and subtraction:                             <ul style="list-style-type: none"> <li>- using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>- applying their increasing knowledge of mental and written method</li> <li>-</li> </ul> </li> </ul> <p><b>Money</b></p> <ul style="list-style-type: none"> <li>• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li> <li>• find different combinations of coins that equal the same amounts of money</li> <li>• solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</li> </ul> <p><b>Time</b></p> <ul style="list-style-type: none"> <li>• tell and write the time including quarter past/to the hour and draw the hands on a clock face to show these times</li> <li>• know the number of minutes in an hour and the number of hours in a day.</li> </ul> |   |
| Fluency             | <ul style="list-style-type: none"> <li>• composition of 6, 7, 8 and 9 as ‘5 and a bit’</li> <li>• Compare numbers within 10 using language of comparison when comparing sets of objects and numbers</li> <li>• Use the inequality and equals symbols in expressions and equations</li> <li>• Focus on odd/ even parts when even numbers are composed of 2 parts, including when 2 parts are equal (doubles)</li> <li>• Identify missing addends and complete missing symbols expressions and equations using the equals or inequality symbol</li> <li>• Use 2-by-4 grid and the rekenrek to find all the ways that 8 can be composed</li> <li>• Apply to expressions and equations</li> <li>• Use 2-by-5 grid (10-frame) and the rekenrek to find all the ways that 10 can be composed</li> </ul>  | <ul style="list-style-type: none"> <li>• Focus on the composition of odd numbers including being made of 2s and 1 more, or 1 odd part and 1 even part</li> <li>• Use the Hungarian number pattern and the rekenrek to find all the ways that 7 can be composed</li> <li>• Focus on 3-by-3 grid and the rekenrek to find all the ways that 9 can be composed</li> <li>• Focus on the composition of the numbers 11 to 19 as ‘10 and a bit’ Apply to missing addend equations.</li> <li>• Compare numbers within 20</li> <li>• Use proportional reasoning to identify the position of numbers within 20 in the linear number system, using midpoints of 5, 10 and 15.</li> <li>• Apply knowledge to expressions and equations.</li> </ul>  |   |

|                     | Term 3  |                                       | Term 4   |  |
|---------------------|---|---------------------------------------|--|--|
| Unit Focus          | Time (2 weeks)  | Multiplication and Division (4 weeks) | Fractions (3 weeks)  | Geometry: position and direction (2 weeks) |
| Priority            | <ul style="list-style-type: none"> <li>• 2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.</li> <li>• 2MD–2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division).</li> </ul>   |                                       |  |  |
| National Curriculum | <p><b>Time</b></p> <ul style="list-style-type: none"> <li>• tell and write the time to <b>five minutes</b>, and draw the hands on a clock face to show these times</li> <li>• know the number of minutes in an hour and the number of hours in a day.</li> <li>• compare and sequence intervals of time</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> <li>• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</li> <li>• show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li> <li>• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</li> </ul> |                                       | <p><b>Fractions</b></p> <ul style="list-style-type: none"> <li>• recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li> <li>• write simple fractions for example, <math>\frac{1}{2}</math> of <math>6 = 3</math> and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> </ul> <p><b>Geometry – position and direction</b></p> <ul style="list-style-type: none"> <li>• order and arrange combinations of mathematical objects in patterns and sequences</li> <li>• 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)</li> </ul> |  |
| Fluency             | <ul style="list-style-type: none"> <li>• Focus on doubling numbers to 10, using the '5 and a bit' structure to double 6, 7, 8 and 9</li> <li>• Focus on the composition of 20</li> <li>• Use known facts within 10 to find missing parts of 20 when the known part is greater than 10</li> <li>• Apply knowledge of facts within 10 to addition and subtraction within 20 WITHIN the 10s boundary.</li> <li>• Use knowledge of doubles to calculate near doubles</li> <li>• See that near doubles are adjacent numbers</li> <li>• See that the sum in a near double is odd</li> <li>• Develop understanding of near doubles</li> <li>• Identify different strategies for near doubles, doubling the smaller addend and adding 1 or the larger addend and subtracting 1</li> </ul>   |                                       | <ul style="list-style-type: none"> <li>• Add 3 numbers using known facts - identifying bonds of 10 and knowledge of the composition of 11 to 19 as '10 and a bit'</li> <li>• Add 2 numbers by 'bridging through 10'</li> <li>• Consolidate understanding of adding 2 numbers by 'bridging through 10'</li> <li>• Solve missing addend problems</li> <li>• Subtract by 'bridging through 10'</li> <li>• Consolidate understanding of subtracting by 'bridging through 10'</li> </ul>  |  |

|                     | Term 5   |                      |                       | Term 6   |  |
|---------------------|--|----------------------|-----------------------|--|--|
| Unit Focus          | Properties of Shape (2 weeks)  | Statistics (3 weeks) | Times tables (1 week) | Length, mass and capacity (4 weeks)  | Recap addition and subtraction ready for KS2 (2 weeks) |
| Priority            | 2G–1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.  |                      |                       |  |  |
| National Curriculum | <p><b>Geometry – properties of shape</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>Statistics</b></p> <ul style="list-style-type: none"> <li>interpret and construct simple pictograms, tally charts, block diagrams and simple tables</li> <li>ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</li> <li>ask and answer questions about totalling and comparing categorical data</li> </ul> <p><b>Times tables</b></p> <ul style="list-style-type: none"> <li>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> </ul> |                      |                       | <p><b>Length and capacity</b></p> <ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, thermometers and measuring vessels</li> <li>compare and order lengths, volume/capacity and record the results using &gt;, &lt; and =</li> </ul> <p><b>Mass</b></p> <ul style="list-style-type: none"> <li>choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit using scales.</li> <li>compare and order mass and record the results using &gt;, &lt; and =</li> </ul>   |  |
| Fluency             | <ul style="list-style-type: none"> <li>Connect the order of multiples of 10 to the order of numbers within 10</li> <li>Use proportional reasoning to identify the position of numbers within 100 in the linear number system</li> <li>Connect missing addend problems to subtraction problems</li> <li>Subtract across the 10 boundary, by subtracting FROM 10 rather than bridging THROUGH 10</li> <li>Practise subtracting within 20, selecting from a range of strategies</li> <li>See that all subtractions can be solved by thinking of how a number is composed and identifying the missing part</li> <li>Focus on the composition of 20</li> <li>Use known facts within 10 to find missing part of 20 when the known part is less than 10</li> </ul>  |                      |                       | <ul style="list-style-type: none"> <li>Use knowledge of composition to reason about expressions and equations and use the equals and inequality symbols in expressions and equations</li> <li>Consolidate doubles and near doubles</li> <li>Introduce strategy of adding two adjacent odd numbers or two adjacent even numbers into a double</li> <li>Consolidate understanding and develop fluency in transforming addition calculations involving two adjacent odd or two adjacent even numbers into a double</li> <li>Develop fluency in bonds within 10 and apply this to calculations within and across the 10-boundary using a range of optional activities</li> <li>A range of 6 sessions providing optional activities to provide practice and opportunities for assessment</li> </ul> |  |