## LOWER HEATH CE PRIMARY MATHEMATICS LONG TERM PLAN YEAR 1/2

|       |  | AUTUMN TE   | <b>ERM</b>                      |  |
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|       |  | YEAR 1  |                                 | YEAR 2   |
| Week: | PM Unit  | Objectives  | PM Unit                         | Objectives   |
| 1-3   | 1. Numbers to 10   | <ul> <li>identify and represent numbers using concrete objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least</li> <li>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</li> <li>read and write numbers from 1 to 20 in numerals and words</li> <li>given a number, identify one more and one less</li> </ul>   | 1. Numbers<br>to 100            | <ul> <li>identify, represent and estimate numbers using different representations, including the number line</li> <li>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens (Year 1 revision)</li> <li>count in steps of 2, 3, and 5 from 0, and in tens from any number, forwards and backwards</li> <li>recognise the place value of each digit in a two-digit number (tens, ones)</li> <li>compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs</li> </ul>   |
| 4-6   | 2. Part-Whole within 10  3. Addition and Subtraction within 10 (1) | <ul> <li>represent and use number bonds and related subtraction facts within 20 read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</li> <li>read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</li> <li>represent and use number bonds and related subtraction facts within 20</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and solve missing number problems such as 7 = ? - 9</li> </ul> | 2. Addition and subtraction (1) | <ul> <li>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</li> <li>recognise the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</li> <li>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> <li>add and subtract numbers using concrete objects, pictorial representations and mentally, including a two-digit number and ones</li> <li>count in steps of 2, 3, and 5 from 0, and in tens from any number, forwards and backwards</li> <li>solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> </ul> |

| 7-9   | 4. Addition<br>and<br>Subtraction<br>within 10<br>(2) | <ul> <li>read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</li> <li>represent and use number bonds and related subtraction facts within 20</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9</li> <li>add and subtract one-digit and two-digit numbers to 20, including zero</li> </ul>                                  | 3. Addition<br>and<br>Subtraction<br>(2)    | <ul> <li>add and subtract numbers using concrete objects, pictorial representations and mentally, including two two-digit numbers</li> <li>solve problems with addition and subtraction, applying increasing knowledge of mental and written methods</li> <li>solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> </ul>  |
|-------|---|---|---|---|
| 10-11 | 6. Numbers<br>to 20                                   | <ul> <li>identify and represent numbers using concrete objects and pictorial representations, including the number line, and use the language of equal to, more than, less than (fewer), most, least</li> <li>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>recognise the place value of each digit in a two-digit number (tens, ones) (Year 2)</li> <li>compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs (Year 2)</li> </ul> | 4. Money                                    | <ul> <li>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li> <li>recognise and know the value of different denominations of coins and notes (Year 1)</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>  |
| 12-13 | 7. Addition<br>within 20                              | <ul> <li>add and subtract one-digit and two-digit numbers to 20, including zero</li> <li>represent and use number bonds and related subtraction facts within 20</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems</li> </ul>  | 5.<br>Multiplication<br>and Division<br>(1) | <ul> <li>solve one-step problems involving multiplication and division, by using concrete objects, pictorial representations and arrays, with the support of the teacher (Year 1)</li> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs</li> <li>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context</li> <li>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> </ul> |

|       | SPRING TERM              |   |   |  |  |
|-------|--------------------------|---|---|--|--|
|       |                          | YEAR 1  | YEAR 2                                      |  |  |
| Week: | PM Unit                  | Objectives  | PM Unit                                     | Objectives   |  |
| 1-2   | 5. 2-D and 3-D<br>Shapes | <ul> <li>recognise and name common 2D and 3D<br/>shapes, including 2D shapes [for example,<br/>rectangles (including squares), circles and<br/>triangles]; 3D shapes [for example, cuboids<br/>(including cubes), pyramids and spheres]</li> </ul>  | 7. Statistics                               | <ul> <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>  |  |
| 3-4   | 8. Subtraction within 20 | <ul> <li>add and subtract one-digit and two-digit numbers to 20, including zero</li> <li>represent and use number bonds and related subtraction facts within 20</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems</li> </ul>  | 6.<br>Multiplication<br>and Division<br>(2) | <ul> <li>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs</li> <li>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> <li>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.</li> </ul> |  |
| 5-7   | 9. Numbers to 50         | <ul> <li>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>identify and represent numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least</li> <li>recognise the place value of each digit in a two-digit number (tens, ones) (Year 2)</li> <li>given a number, identify one more and one less</li> <li>compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs (Year 2)</li> </ul> | 10. Fractions                               | <ul> <li>recognise, find and name a half as one of two equal parts of an object, shape or quantity (Year 1)</li> <li>recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity</li> <li>write simple fractions, for example 1/2 of 6 = 3, and recognise the equivalence of 2/4 and 1/2</li> <li>non-statutory guidelines: pupils should count in fractions up to 10, starting from any number</li> </ul>  |  |

|       |  | <ul> <li>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9</li> </ul>  |                           |  |
|-------|--|---|---------------------------|--|
| 8-9   | 10.<br>Introduction to<br>length and<br>height | <ul> <li>compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</li> <li>measure and begin to record lengths and heights</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9</li> </ul>  | 8. Length and height      | <ul> <li>compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</li> <li>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</li> <li>solve problems with addition and subtraction, using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> </ul> |
| 10-12 | 11.Introducing<br>Weight and<br>Volume         | <ul> <li>compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9</li> <li>measure and begin to record mass/weight</li> <li>measure and begin to record capacity and volume</li> </ul> | 9. Properties<br>of Shape | <ul> <li>compare and sort common 2D and 3D shapes and everyday objects</li> <li>identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line</li> <li>order and arrange combinations of mathematical objects in patterns and sequences</li> <li>identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.</li> </ul>  |

|       | SUMMER TERM             |   |   |  |  |
|-------|-------------------------|---|---|--|--|
|       |                         | YEAR 1  |   | YEAR 2   |  |
| Week: | PM Unit                 | Objectives  | PM Unit                                   | Objectives   |  |
| 1-3   | 12.<br>Multiplication   | <ul> <li>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</li> <li>solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays, with the support of the teacher</li> <li>non-statutory guidance: pupils use the language of position, direction and motion, including left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside</li> </ul> | 12. Problem solving and efficient methods | <ul> <li>use place value and number facts to solve problems</li> <li>solve problems with addition and subtraction, using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <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 involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context</li> <li>show that multiplication of two numbers can be done in any order (commutative)</li> </ul> |  |
|       | 13. Division            | solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.  | 44 Weight Value                           | and division of one number by another cannot   |  |
| 4-6   | 14. Halves and quarters | <ul> <li>recognise, find and name a half as one of two equal parts of an object, shape or quantity</li> <li>recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</li> </ul>   | 14. Weight, Volume and Temperature        | <ul> <li>compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</li> <li>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers,</li> </ul>  |  |

|      | 16. Numbers to 100        | <ul> <li>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>identify and represent numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least</li> <li>recognise the place value of each digit in a two-digit number (tens, ones) (Year 2)</li> <li>given a number, identify one more and one less</li> <li>compare and order numbers from 0 up to 100; use &lt;, &gt; and = signs (Year 2)</li> <li>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9</li> </ul> |                            | scales, thermometers and measuring vessels   |
|------|---------------------------|---|----------------------------|--|
| 7    | 15 Position and direction | <ul> <li>describe position, direction and movement, including whole, half, quarter and three-quarter turns</li> <li>non-statutory guidance: pupils use the language of position, direction and motion, including left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside</li> </ul>  | 11. Position and direction | <ul> <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</li> <li>anti-clockwise)</li> <li>order and arrange combinations of mathematical objects in patterns and sequences</li> </ul> |
| 8-10 | 17. Time                  | <ul> <li>sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</li> <li>recognise and use language relating to dates, including days of the week, weeks, months and years</li> </ul>   | 13. Time                   | <ul> <li>compare and sequence intervals of time</li> <li>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. (Year 1)</li> <li>tell and write the time to five minutes, including quarter past/to the hour and</li> </ul>   |

|           | <ul> <li>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times</li> <li>measure and begin to record time (hours, minutes, seconds)</li> <li>compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9</li> </ul> | 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 |
|-----------|---|--|
| 18. Money | <ul> <li>recognise and know the value of different denominations of coins and notes</li> <li>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</li> </ul>  |  |