



## MEDIUM TERM PLANNING

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| Subject | Year Group | Term   |
| Maths   | 2          | Autumn |

| Topic                    | National Curriculum Objectives  | Power Maths Unit   | NCETM Professional development documents  | Ready to progress Criteria   |
|--------------------------|---|--|---|--|
| Number and Place Value   | <ul style="list-style-type: none"> <li>Read and write numbers to at least 100 in numerals and in words.</li> <li>Identify, represent and estimate numbers using different representations, including the number line</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 <math>&gt;</math>, <math>&lt;</math> and <math>=</math> signs.</li> <li>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.</li> </ul> | <ul style="list-style-type: none"> <li>Power Maths Unit 1</li> </ul> | See Year 1 Spine 1 for revision points  | <ul style="list-style-type: none"> <li>2NPV-1 Recognise the place value of each digit in two-digit numbers, and compose and decompose twodigit numbers using standard and non-standard 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> </ul> |
| Addition and Subtraction | <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>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</li> <li>Solve problems with addition and subtraction: - using concrete</li> </ul>  | <ul style="list-style-type: none"> <li>Power Maths unit 2</li> </ul> | Spine 1<br><br>1.11 Addition and subtraction: bridging 10<br><br>1.12 Subtraction as a difference | <ul style="list-style-type: none"> <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> </ul>   |

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|                             | <p>objects and pictorial representations, including those involving numbers, quantities and measures – applying their increasing knowledge of mental and written methods.</p> <ul style="list-style-type: none"> <li>• Add and 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 – adding three one-digit numbers.</li> </ul>  |  | 1.13 Addition and subtraction: two digit and single digit numbers   |  |
| Addition and Subtraction    | <ul style="list-style-type: none"> <li>• Solve problems with addition and subtraction: – using concrete objects and pictorial representations, including those involving numbers, quantities and measures – applying their increasing knowledge of mental and written methods.</li> <li>• Add and 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 – adding three one-digit numbers.</li> </ul> | <ul style="list-style-type: none"> <li>• Power Maths Unit 3</li> </ul> | <p>Spine 1</p> <p>1.13 Addition and subtraction: two digit and single digit numbers</p> <p>1.14 1.13 Addition and subtraction: two digit and multiples of ten</p> | <ul style="list-style-type: none"> <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> <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> |
| Measure Money               | <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>  | <ul style="list-style-type: none"> <li>• Power Maths Unit 4</li> </ul> | <ul style="list-style-type: none"> <li>•</li> </ul>   | <ul style="list-style-type: none"> <li>•</li> </ul>  |
| Multiplication and Division | <p>Calculate mathematical statements for multiplication and division within the multiplication</p>  | <ul style="list-style-type: none"> <li>• Power Maths Unit 5</li> </ul> | <p>Spine 2</p>  | <ul style="list-style-type: none"> <li>• 2MD–1 Recognise repeated addition contexts, representing</li> </ul>   |

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|  | <p>tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs.</p> <ul style="list-style-type: none"> <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>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</p> |  | <p>2.2 Structures: multiplication representing equal groups</p> <p>2.3 Times tables: groups of 2 and commutativity (part 1)</p> <p>2.4 Times tables: groups of 10 and 5. And factors of 0 and 1</p> <p>2.5 Commutativity (parts 2) Doubling and halving</p> | <p>them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.</p> |
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MEDIUM TERM PLANNING

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|---------|------------|--------|
| Subject | Year Group | Term   |
| Maths   | 2          | Spring |

| Topic          | <ul style="list-style-type: none"> <li>National Curriculum Objectives</li> </ul>   | Power Maths Unit   | <ul style="list-style-type: none"> <li>NCE/IM Professional development documents</li> </ul>   | <ul style="list-style-type: none"> <li>Ready to progress Criteria</li> </ul>   |
|----------------|--|--|---|--|
| Multiplication | <ul style="list-style-type: none"> <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>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</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> | <ul style="list-style-type: none"> <li>Power Maths unit 6</li> </ul> | Spine 2<br><br>2.2 Structures: multiplication representing equal groups<br><br>2.3 Times tables: groups of 2 and commutativity (part 1)<br><br>2.4 Times tables: groups of 10 and 5. And factors of 0 and 1<br><br>2.5 Commutativity (parts 2) Doubling and halving | <ul style="list-style-type: none"> <li>MD-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> |
| Statistics     | <ul style="list-style-type: none"> <li>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</li> </ul>   | <ul style="list-style-type: none"> <li>Power Maths unit 7</li> </ul> | <ul style="list-style-type: none"> <li></li> </ul>  | <ul style="list-style-type: none"> <li></li> </ul>   |

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|                              | <ul style="list-style-type: none"> <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>  |  |   |   |
| Measure<br>Length and Height | <ul style="list-style-type: none"> <li>• 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, thermometers and measuring vessels.</li> <li>• Compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math>.</li> <li>• Solve problems with addition and subtraction: - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods.</li> </ul> | <ul style="list-style-type: none"> <li>• Power Maths unit 8</li> </ul> | • | •   |
| Properties of Shapes         | <ul style="list-style-type: none"> <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>• Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.</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> <li>• Identify 2D shapes on the surface of 3D shapes, (for example, a</li> </ul>  | <ul style="list-style-type: none"> <li>• Power Maths unit 9</li> </ul> | • | <ul style="list-style-type: none"> <li>• ZG-1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.</li> </ul> |

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|           | circle on a cylinder and a triangle on a pyramid).   |                  |   |   |
| Fractions | <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 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math>.</li> </ul> | • Power Maths 10 | • | • |

BILSTON CHURCH OF ENGLAND PRIMARY



## MEDIUM TERM PLANNING

| Subject | Year Group | Term   |
|---------|------------|--------|
| Maths   | 2          | Summer |

| Topic   | • National Curriculum Objectives   | • Power Maths Unit    | • NCEJM Professional development documents  | • Ready to progress Criteria  |
|---|--|-----------------------|---|---|
| Position and Direction                                    | <ul style="list-style-type: none"> <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> <li>Order and arrange combinations of mathematical objects in patterns and sequences.</li> </ul> | • Power Maths unit 11 | •   | •   |
| Solve problems<br>Place value<br>Addition and subtraction | <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>Use place value and number facts to solve problems.</li> </ul>   | • Power Maths unit 12 | Spine 1<br>1.11 Addition and subtraction: bridging 10<br>1.12 Subtraction as a difference | • 2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers. |

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| <p>Multiplication and division</p> | <ul style="list-style-type: none"> <li>• Add and subtract amounts of money to give change, using both £ and p in practical contexts.</li> <li>• Solve problems with addition and subtraction: - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods.</li> <li>• ● Getting started 2 Number – addition and subtraction</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 with addition and subtraction: - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods</li> <li>• Add and 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 - adding three one-digit numbers.</li> <li>• 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.</li> <li>• Write and calculate mathematical statements for multiplication and division using the multiplication tables that children know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</li> </ul> |  | <p>1.13 Addition and subtraction: two digit and single digit numbers</p> <p>1.14 Addition and subtraction: two digit numbers and multiples of ten</p> <p>1.15 Addition: two digit and two digit numbers.</p> <p>1.16 Subtraction: two digit and two digit numbers.</p> <p>2.2 Structures: multiplication representing equal groups</p> <p>2.3 Times tables: groups of 2 and commutativity (part 1)</p> <p>2.4 Times tables: groups of 10 and 5. And factors of 0 and 1</p> <p>2.5 Commutativity (parts 2) Doubling and halving</p> <p>2.6 Structures: quotative and partitive division</p> | <ul style="list-style-type: none"> <li>• MD-2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotative division).</li> </ul> |
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| <p>Measure<br/>Time</p>                               | <ul style="list-style-type: none"> <li>• Measure and begin to record the following: - lengths and heights - mass/weight - capacity and volume - time (hours, minutes, seconds).</li> <li>• 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.</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> <li>• Compare durations of events (for example to calculate the time taken by particular events or tasks).</li> </ul>   | <ul style="list-style-type: none"> <li>• Power Maths unit 13</li> </ul> | <ul style="list-style-type: none"> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>•</li> </ul> |
| <p>Measure<br/>Weight, volume and<br/>temperature</p> | <p>Compare, describe and solve practical problems for: - lengths and heights (for example, long/short, longer/shorter, tall/short, double/half) - mass/weight (for example, heavy/light, heavier than, lighter than) - capacity and volume (for example, full/empty, more than, less than, half, half full, quarter) - time (for example, quicker, slower, earlier, later).</p> <ul style="list-style-type: none"> <li>• Compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math>.</li> <li>• 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, thermometers and measuring vessels.</li> </ul> | <p>Power Maths unit 14</p>  |   |   |



