**Bushfield Infants School - Maths Long Term Plan from White Rose**

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|  | **Nursery** | **Reception** | **Year 1** | **Year 2** |
| **Autumn** | Colours, Matching and Sorting  Number 1  Number 2, Subitising  Pattern  Consolidation | Getting to know you (2 weeks)  Match, sort and Compare (2 weeks)  Talk about measures and patterns (2 weeks)  It’s me 1,2,3 (2 weeks)  Circles and Triangles (1 week)  1,2,3,4,5 (2 weeks)  Shapes with 4 sides (1 week) | Number – Place value within 10 (5 weeks)  Number – Addition and subtraction within 10 (5 weeks)  Geometry – shape (1 week)  Consolidation (1 week) | Number - Place Value (4 weeks)  Number - Addition and Subtraction (5 weeks)  Geometry – Shape (3 weeks) |
| **Spring** | Number 3, Subitising  Number 4, Composition  Number 5, Composition  Consolidation  Number 6  Height and Length  Mass and capacity  Consolidation | Alive in 5 (2 weeks)  Mass and Capacity (1 week)  Growing 6,7,8 (2 weeks)  Length, Height and Time (2 weeks)  Building 9 and 10 (3 weeks)  Exploring 3D shapes (2 weeks) | Number – Place value within 20 (3 weeks)  Number – Addition and Subtraction within 20 (3 weeks)  Number – Place value within 50 (2 weeks)  Measurement – Length and Height (2 weeks)  Measurement – Mass and Volume (2 weeks) | Measurement – Money (2 weeks)  Calculating – Multiplication and Division (5 weeks)  Measurement - Length and Height (2 weeks)  Measurement - Mass, Capacity and Temperature (3 weeks) |
| **Summer** | Sequencing  Positional Language  More than / fewer  2D shape, 3D shape  Consolidation  Number composition  What comes after?  What comes before?  Numbers to 5  Consolidation | To 20 and beyond (2 weeks)  How many now? (1 week)  Manipulate, Compose and Decompose (2 weeks)  Sharing and Grouping (2 weeks)  Visualise, Build and Map (3 weeks)  Make Connections (1 week)  Consolidation (1 week) | Number – Multiplication and Division (3 weeks)  Number – Fractions (2 weeks)  Geometry – Position and Direction (1 week)  Number – Place Value within 100 (2 weeks)  Measurement – Money (1 week)  Measurement – Time (2 weeks)  Consolidation (1 week) | Number – Fractions (3 weeks)  Measurement - Time (3 weeks)  Statistics (2 weeks)  Geometry - Position and Direction (2 weeks)  Consolidation (2 weeks) |

**Whole School Overview for Maths**

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|  | **Nursery** | **Reception** | **Year 1** | **Year 2** |
| **Number, Counting and Place Value** | * Subitise 1, 2, 3. * Touch count to 3 * Recognise the numbers 1 and 2 and match to the quantity. * Say one number for each item when counting. * Count reliably to 5. * Show finger numbers up to 5. * Link the numerals 1-5 to a quantity * Order numbers to 5. * Beginning to record the numerals to 5. * Verbally rote count to 10. * Understand the cardinal principle. | * Count objects, actions and sounds to 10. * Match numeral and quantity to 10. * Subitise numbers to 5. * Count verbally beyond 10. * Count to 20 and beyond. * Order numbers to 10. * Identify odd and even numbers. * Make teen numbers with tens and ones. * Count on and back from different numbers beyond 10 * Find missing numbers within 20. * Identify numbers beyond 20 | * Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. * Count numbers to 100 in numerals. Count in multiples of twos, fives and tens. * Identify and represent numbers using objects and pictorial representations. * Read and write numbers to 100 in numerals. * Read and write numbers from 1 to 20 in numerals and words. * Given a number, identify one more and one less. | * Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. * Read and write numbers to at least 100 in numerals and in words. * Identify, represent and estimate numbers using different representations, including the number line. * Recognise the place value of each digit in a two-digit number (tens, ones). * Compare and order numbers from 0 up to 100; use and = signs. * Use place value and number facts to solve problems. |
| **Calculating:**  **Addition and Subtraction** | * Know the composition of numbers to 4. * Solve real world math problems with numbers to 5. | * Compare quantities with the language more than and fewer than. * Understand the same. * Find one more or one less to 10. * Recall number bonds and corresponding subtraction facts to 5. * Recall number bonds and corresponding subtraction facts to 10. * Know the composition of numbers to 10. * Solve real world maths problems within 10 and explain my reasoning. | * Add and subtract one-digit and two digit numbers to 20, including zero. * Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 =  – 9. | * 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   * 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. |
| **Calculating:**  **Multiplication and Division** | * Solve real world math problems with numbers to 5. | * Recall my double facts within 10. * Solve real world maths problems within 10 and explain my reasoning. * Share a number within 10. * Understand groups of 10. * Find half of a set of objects * Share between 2/3/4/5 * Investigate problems by exploring different possibilities. * Count in two’s. | * 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. | * Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. * Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. * Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. * Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. |
| **Fractions** | * Solve real world math problems with numbers to 5 – finding half. | * Share a number within 10. * Find half of a set of objects * Share between 2/3/4/5 | * Recognise, find and name a half as one of two equal parts of an object, shape or quantity. * Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | * Recognise, find, name and write fractions 1/3, 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity. * Recognise the equivalence of 2/4 and 1/2 * Write simple fractions for example, * 1/2 of 6 = 3 |
| **Measurement** | * Compare objects according to their size, length, weight and capacity. * Develop simple ways of comparing objects. | * Compare length, weight and capacity using suitable language. | * Compare, describe and solve practical problems for:   lengths and heights  mass/weight  capacity and volume  time   * Measure and begin to record the following:   lengths and heights  mass/weight  capacity and volume  time (hours, minutes, seconds)   * Recognise and know the value of different denominations of coins and notes. * Sequence events in chronological order using language, for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. * Recognise and use language relating to dates, including days of the week, weeks, months and years. * Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. | * Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (℃); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. Compare and order lengths, mass, volume/capacity and record the results using >, < 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 * 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. |
| **Geometry** | * Talk about patterns in the environment. * Create ABAB patterns. * Extend ABAB patterns and spot and explain errors. * Explore 2D and 3D shapes. * Select appropriate shapes for a purpose. * Talk about 2D and 3D shapes. * Begin to use mathematical language to describe shape. * Combine shapes to make new ones. * Understand positional language. * Beginning to use vocabulary to sequence of events using words such as first or then. * Use positional language to describe the location of objects. * Describe a familiar route. | * Copy, continue and create a repeating pattern. * Make patterns with varying rules * Name 2D and 3D shapes. * Shapes can be rotated. * Explore the composition of shapes. * Use my shape knowledge to investigate and solve problems. * Use shape to investigate rotating shapes to make new shapes * Give and follow directions. | * Recognise and name common 2- D shapes, for example, rectangles (including squares), circles and triangles. * Describe position, direction and movement, including whole, half, quarter and three-quarter turns. | * Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. * Identify 2-D shapes on the surface of 3-D shapes, for example, a circle on a cylinder and a triangle on a pyramid. * Compare and sort common 2-D shapes and everyday objects. * 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). |
| **Statistics** |  |  |  | * 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. |

**Overview for Autumn term in Mathematics using White Rose**

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|  | **Nursery** | **Reception** | **Year 1** | **Year 2** |
| **Number, Counting and Place Value** | * Subitise 1, 2, 3. * Touch count to 3 * Recognise the numbers 1 and 2 and match them to the quantity. * Say one number for each item when counting. * Count reliably to 5. * Show finger numbers up to 5. | * Count objects, actions and sounds to 10. * Match numeral and quantity to 10. * Subitise numbers to 5. * Order numbers to 10. | * Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. * Count numbers to 100 in numerals; count in multiples of twos, fives and tens. * Identify and represent numbers using objects and pictorial representations * Read and write numbers to 100 in numerals. * Read and write numbers from 1 to 20 in numerals and words. * Given a number, identify one more and one less. | * Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. * Read and write numbers to at least 100 in numerals and in words. * Identify, represent and estimate numbers using different representations, including the number line. * Recognise the place value of each digit in a two-digit number (tens, ones). * Compare and order numbers from 0 up to 100; use and = signs. * Use place value and number facts to solve problems. |
| **Calculating:**  **Addition and Subtraction** |  | * Compare quantities with the language more than and fewer than. * Understand the same. * Find one more or one less to 10. * Recall number bonds and corresponding subtraction facts to 5. | * Add and subtract one-digit and two digit numbers to 20, including zero. * Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 =  – 9. | * 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 * 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 |
| **Measurement** |  | * Compare length, weight and capacity using suitable language. |  |  |
| **Geometry** | * Talk about patterns in the environment. * Create ABAB patterns. * Extend ABAB patterns and spot and explain errors. * Explore 2D and 3D shapes. * Select appropriate shapes for a purpose. | * Copy, continue and create a repeating pattern. * Make patterns with varying rules * Name 2D and 3D shapes. * Shapes can be rotated. | * Recognise and name common 2- D shapes, for example, rectangles (including squares), circles and triangles. | * Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. * Identify 2-D shapes on the surface of 3-D shapes, for example, a circle on a cylinder and a triangle on a pyramid * Compare and sort common 2-D shapes and everyday objects |

**Overview for Spring term in Mathematics using White Rose**

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|  | **Nursery** | **Reception** | **Year 1** | **Year 2** |
| **Number, Counting and Place Value** | * Subitise 1, 2, 3. * Say one number for each item when counting. * Count reliably to 5. * Show finger numbers up to 5. * Link the numerals 1-5 to a quantity * Understand the cardinal principle. | * Count objects, actions and sounds to 10. * Match numeral and quantity to 10. * Count verbally beyond 10. * Order numbers to 10. | * Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. * Count numbers to 100 in numerals; count in multiples of twos, fives and tens. * Identify and represent numbers using objects and pictorial representations. Read and write numbers to 100 in numerals. * Read and write numbers from 1 to 20 in numerals and words. * Given a number, identify one more and one less. |  |
| **Calculating:**  **Addition and Subtraction** | * Know the composition of numbers to 4. * Solve real world math problems with numbers to 5. | * Compare quantities with the language more than and fewer than. * Understand the same. * Find one more or one less to 10. * Recall number bonds and corresponding subtraction facts to 5. * Recall number bonds and corresponding subtraction facts to 10. * Know the composition of numbers to 10. * Solve real world maths problems within 10 and explain my reasoning. | * Add and subtract one-digit and two digit numbers to 20, including zero. * Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 =  – 9. |  |
| **Calculating:**  **Multiplication and Division** | * Solve real world math problems with numbers to 5. |  |  | * Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. * Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. * Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. * Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts |
| **Measurement** | * Compare objects according to their size, length, weight and capacity. * Develop simple ways of comparing objects. | * Compare length, weight and capacity using suitable language. | * Compare, describe and solve practical problems for:   lengths and heights  mass/weight  capacity and volume  time   * Measure and begin to record the following:   lengths and heights  mass/weight  capacity and volume  time (hours, minutes, seconds) | * Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (℃); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. Compare and order lengths, mass, volume/capacity and record the results using >, < 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. |
| **Geometry** | * Explore 2D and 3D shapes. * Select appropriate shapes for a purpose. * Talk about 2D and 3D shapes. * Begin to use mathematical language to describe shape. | * Copy, continue and create a repeating pattern. * Make patterns with varying rules * Name 2D and 3D shapes. * Shapes can be rotated. * Explore the composition of shapes. * Use my shape knowledge to investigate and solve problems. * Use shape to investigate rotating shapes to make new shapes |  |  |

**Overview for Summer term in Mathematics using White Rose**

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| --- | --- | --- | --- | --- |
|  | **Nursery** | **Reception** | **Year 1** | **Year 2** |
| **Number, Counting and Place Value** | * Count reliably to 5. * Show finger numbers up to 5. * Link the numerals 1-5 to a quantity * Order numbers to 5. * Beginning to record the numerals to 5. * Verbally rote count to 10. * Understand the cardinal principle. | * Count to 20 and beyond. * Identify odd and even numbers. * Make teen numbers with tens and ones. * Count on and back from different numbers beyond 10 * Find missing numbers within 20. * Identify numbers beyond 20 | * Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. * Count numbers to 100 in numerals; count in multiples of twos, fives and tens. * Identify and represent numbers using objects and pictorial representations. * Read and write numbers to 100 in numerals. * Read and write numbers from 1 to 20 in numerals and words. * Given a number, identify one more and one less. |  |
| **Calculating:**  **Addition and Subtraction** | * Know the composition of numbers to 4. * Solve real world math problems with numbers to 5. | * Compare quantities with the language more than and fewer than. * Understand the same. * Find one more or one less to 10. * Recall number bonds and corresponding subtraction facts to 10. * Know the composition of numbers to 10. * Solve real world maths problems within 10 and explain my reasoning. |  |  |
| **Calculating:**  **Multiplication and Division** | * Solve real world math problems with numbers to 5. | * Recall my double facts within 10. * Solve real world maths problems within 10 and explain my reasoning. * Share a number within 10. * Understand groups of 10. * Find half of a set of objects * Share between 2/3/4/5 * Investigate problems by exploring different possibilities. * Count in two’s. | * 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. |  |
| **Fractions** | * Solve real world math problems with numbers to 5 – finding half. | * Share a number within 10. * Find half of a set of objects * Share between 2/3/4/5 | * Recognise, find and name a half as one of two equal parts of an object, shape or quantity. * Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | * Recognise, find, name and write fractions 1/3, 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity. * Recognise the equivalence of 2/4 and ½. * Write simple fractions for example, * 1/2 of 6 = 3 |
| **Measurement** |  |  | * Compare, describe and solve practical problems for:   lengths and heights  mass/weight  capacity and volume  time   * Measure and begin to record the following:   lengths and heights  mass/weight  capacity and volume  time (hours, minutes, seconds)   * Recognise and know the value of different denominations of coins and notes. * Sequence events in chronological order using language, for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. * Recognise and use language relating to dates, including days of the week, weeks, months and years. * Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. | * 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. |
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| **Statistics** |  |  |  | * 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 |