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

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|  | **Nursery** | **Reception** | **Year 1** | **Year 2** |
| **Autumn** | Colours, Matching and SortingNumber 1Number 2, SubitisingPatternConsolidation | 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, SubitisingNumber 4, CompositionNumber 5, CompositionConsolidationNumber 6Height and LengthMass and capacityConsolidation | 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** | SequencingPositional LanguageMore than / fewer2D shape, 3D shapeConsolidationNumber compositionWhat comes after?What comes before?Numbers to 5Consolidation | 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 onesa 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 volumetime (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.
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**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
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**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/weightcapacity and volume time * Measure and begin to record the following:

lengths and heights mass/weightcapacity and volumetime (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
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**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 heightsmass/weightcapacity and volumetime * Measure and begin to record the following:

lengths and heightsmass/weightcapacity and volumetime (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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| **Geometry** | * Talk about patterns in the environment.
* Create ABAB patterns.
* Extend ABAB patterns and spot and explain errors.
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* 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.
 | * 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.
 | * Describe position, direction and movement, including whole, half, quarter and three-quarter turns.
 | * 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).
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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
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