

# Year 2

## Long Term Plan

### 2022 -2023



|        | Week 1                       | Week 2 | Week 3                                       | Week 4 | Week 5                                    | Week 6 | Week 7                                  | Week 8 | Week 9   | Week 10 | Week 11 | Week 12 |
|--------|------------------------------|--------|--|--------|---|--------|---|--------|--|---------|---------|---------|
| Autumn | Number<br><b>Place value</b> |        |  |        | Number<br><b>Addition and Subtraction</b> |        |   |        | Geometry<br><b>Shape</b>                             |         |         |         |
| Spring | Measurement<br><b>Money</b>  |        | Number<br><b>Multiplication and Division</b> |        |   |        | Measurement<br><b>Length and Height</b> |        | Measurement<br><b>Mass, Capacity and Temperature</b> |         |         |         |
| Summer | Number<br><b>Statistics</b>  |        | Number<br><b>Fractions</b>                   |        | Geometry<br><b>Position and Direction</b> |        | <b>Problem Solving</b>                  |        | Measurement<br><b>Time</b>                           |         |         |         |

Our maths scheme for Year 1 - 6 follows our own carefully curated progression. Learning is built upon progressively and appropriately for the children's level of experience and readiness to progress. Although a guide for content duration is made, teachers regularly use their own professional judgement to extend, shorten and adapt learning within a unit. Due to this, flexibility is accepted for our maths teaching. Teachers can use additional time throughout the year to revise and recap key learning such as number and place value as well as an emphasis on the use of four operations to ensure these skills are regularly used discreetly as well as within contexts.

Our overviews follow the objectives outlined in the White Rose units and are enhanced through the careful consideration of NCETM resources to ensure our children have opportunity to gain a deeper understanding of the learning taking place. Where NCETM links are not available, teachers are able to use professional judgement on any linked NCETM spines as well as enhancing White Rose learning with additional resources. Children are exposed to learning through collaborative learning lessons, practical lessons, and independent learning.

Sentence stems are used in all units to embed language and vocabulary as well as the tools for children to express their knowledge in problem solving and reasoning. Out of year group White Rose links ensure teachers are clear with previous learning as well as future learning.

# AUTUMN

## Number: Place Value

### NEW VOCABULARY

2-digit; base 10; pattern; sequence; numbers to one hundred, hundreds, partition, recombine, hundred more/less

#### White Rose Objective

#### NCETM link

Numbers to 20

Count objects to 100 by making 10s

Recognise tens and ones

Use a place value chart

Partition number to 100

Write number to 100 in words

Flexibly partition numbers to 100

Write numbers to 100 in expanded form

10s on the number line to 100

Estimate numbers on a number line

Compare objects

Compare numbers

Order objects and numbers

Count in 2s, 5s and 10s

Count in 3s

2.3 – Teaching point 1

# AUTUMN

## Addition & Subtraction

### NEW VOCABULARY

bar model; operation, inverse operation; column; exchange; bridge; method

| White Rose Objective   | NCETM link   |
|--|--|
| <b>Bonds to 10</b>   |  |
| <b>Fact families- addition and subtraction bonds within 20</b>     | 1.11 – Teaching point 3                            |
| <b>Related facts</b>   | 1.11 – Teaching point 3                            |
| <b>Bonds to 100 (tens)</b>   | 1.16 – Teaching point 2                            |
| <b>Add and subtract 1s</b>   |  |
| <b>Add by making 10</b>  |  |
| <b>Add three 1-digit numbers</b>                                   | 1.11 - Teaching point 2                            |
| <b>Add to the next 10</b>  |  |
| <b>Add across a 10</b>   | 1.13 – Teaching point 2 & 3                        |
| <b>Subtract across 10</b>  | 1.13 – Teaching point 2                            |
| <b>Subtract from a 10</b>  |  |
| <b>Subtract a 1-digit number from a 2-digit number (across 10)</b> | 1.13 – Teaching point 2                            |
| <b>10 more, 10 less</b>  |  |
| <b>Add and subtract 10s</b>  |  |
| <b>Add two 2-digit numbers (not across a 10)</b>                   | 1.15 – Teaching point 2                            |
| <b>Add two 2-digit numbers (across a 10)</b>                       | 1.15 – Teaching point 2                            |
| <b>Subtract two 2-digit numbers (not across a 10)</b>              | 1.15 – Teaching point 2<br>1.16 – Teaching point 2 |
| <b>Subtract two 2-digit numbers (across a 10)</b>                  | 1.15 – Teaching point 2                            |

|                                       |                         |
|---------------------------------------|-------------------------|
|                                       | 1.16 – Teaching point 2 |
| <b>Mixed addition and subtraction</b> |                         |
| <b>Compare number sentences</b>       | 1.12 – Teaching point 1 |
| <b>Missing number problems</b>        |                         |

## AUTUMN

### Shape

#### NEW VOCABULARY

pentagon, hexagon, octagon, quadrilateral; prism; vertices, vertex; rotate; symmetry, symmetrical, line of symmetry; horizontal, vertical; fold; pattern, repeating pattern.

| <b>White Rose Objective</b>                     | <b>NCETM link</b> |
|---|-------------------|
| <b>Recognise 2D and 3D shapes</b>               |                   |
| <b>Count sides on 2d shapes</b>                 |                   |
| <b>Count vertices on 2D shapes</b>              |                   |
| <b>Draw 2D shapes</b>                           |                   |
| <b>Lines of symmetry on shapes</b>              |                   |
| <b>Use lines of symmetry to complete shapes</b> |                   |
| <b>Sort 2D shapes</b>                           |                   |
| <b>Count faces on 3D shapes</b>                 |                   |
| <b>Count edges on 3D shapes</b>                 |                   |
| <b>Count vertices on 3D shapes</b>              |                   |
| <b>Sort 3D shapes</b>                           |                   |
| <b>Make patterns with 2D and 3D shapes</b>      |                   |

# SPRING

## Money

### VOCABULARY

change

| White Rose Objective                   | NCETM link |
|--|------------|
| Count money - pence                    |            |
| Count money – pounds (notes and coins) |            |
| Count money – notes and coins          |            |
| Select money                           |            |
| Make the same amount                   |            |
| Compare money                          |            |
| Find the total                         |            |
| Find the difference                    |            |
| Find the change                        |            |
| Two-step problems                      |            |

# SPRING

## Multiplication and Division

### NEW VOCABULARY

times-table; facts; multiples; repeated addition; lots of; of; multiply; multiplied by; times; commutative; twos, fives, tens, threes; array; go into; divide, divide between, division, dividing; grouping, sharing

| White Rose Objective   | NCETM link             |
|------------------------|------------------------|
| Recognise equal groups | 2.2 – Teaching point 1 |
| Make equal groups      | 2.2 – Teaching point 2 |

|  |                        |
|--|------------------------|
| <b>Add equal groups</b>                            | 2.2 – Teaching point 3 |
| <b>Multiplication sentences using the x symbol</b> | 2.2 – Teaching point 4 |
| <b>Multiplication sentences from pictures</b>      | 2.2 – Teaching point 4 |
| <b>Use arrays</b>                                  | 2.3 – Teaching point 1 |
| <b>2 times-table</b>                               | 2.3 – Teaching point 2 |
| <b>5 times-table</b>                               | 2.4 – Teaching point 3 |
| <b>10 times-table</b>                              | 2.4 – Teaching point 1 |
| <b>Make equal groups – sharing</b>                 | 2.6 – Teaching point 3 |
| <b>Make equal groups – grouping</b>                | 2.6 – Teaching point 2 |
| <b>Divide by 2</b>                                 | 2.6 – Teaching point 4 |
| <b>Odd &amp; even numbers</b>                      |                        |
| <b>Divide by 5</b>                                 | 2.6 – Teaching point 4 |
| <b>Divide by 10</b>                                | 2.6 – Teaching point 4 |

## SPRING

### Length and Height

#### NEW VOCABULARY

**distance; metres**

| <b>White Rose Objective</b>         | <b>NCETM link</b> |
|-------------------------------------|-------------------|
| <b>Measure length (cm)</b>          |                   |
| <b>Measure length (m)</b>           |                   |
| <b>Compare lengths</b>              |                   |
| <b>Order lengths</b>                |                   |
| <b>Four operations with lengths</b> |                   |

# SPRING

## Mass, Capacity and Temperature

### NEW VOCABULARY

g/kg; ml/l; temperature, thermometer, degrees Celsius, increase, decrease, warmer, colder

| White Rose Objective      | NCETM link |
|---------------------------|------------|
| Compare mass              |            |
| Measure mass in grams     |            |
| Measure mass in kilograms |            |
| Compare volume            |            |
| Millilitres               |            |
| Litres                    |            |
| Temperature               |            |

# SUMMER

## Statistics

### NEW VOCABULARY

count, tally, tally chart, table; data, represent, sort; pictogram, symbol; block diagram, axis; label, title, scale; most popular, most common, least popular, least common

| White Rose Objective               | NCETM link |
|------------------------------------|------------|
| Make tally charts                  |            |
| Draw pictograms (1-1)              |            |
| Interpret pictograms (1-1)         |            |
| Draw pictograms (2, 5 and 10)      |            |
| Interpret pictograms (2, 5 and 10) |            |

|                       |  |
|-----------------------|--|
| <b>Block diagrams</b> |  |
|-----------------------|--|

| <b>SUMMER</b>   |                   |
|---|-------------------|
| <b>Fractions</b>  |                   |
| NEW VOCABULARY  |                   |
| two quarters, three quarters, one third, two thirds; unit fraction, numerator, denominator, vinculum; equivalence, equivalent |                   |
| <b>White Rose Objective</b>   | <b>NCETM link</b> |
| <b>Make equal parts</b>   |                   |
| <b>Recognise a half</b>   |                   |
| <b>Find a half</b>  |                   |
| <b>Recognise a quarter</b>  |                   |
| <b>Find a quarter</b>   |                   |
| <b>Recognise a third</b>  |                   |
| <b>Find a third</b>   |                   |
| <b>Unit fractions</b>   | Year 2 - Point 1  |
| <b>Non-unit fractions</b>   | Year 2 - Point 1  |
| <b>Equivalence of <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math></b>   |                   |
| <b>Find three quarters</b>  | Year 2 – Point 5  |
| <b>Count in fractions</b>   | Year 2 – Point 5  |

| <b>SUMMER</b>                 |
|-------------------------------|
| <b>Position and Direction</b> |
| NEW VOCABULARY                |



|  |                   |
|--|-------------------|
| <b>direction, forwards, backwards; right angle; rotation, clockwise, anticlockwise</b> |                   |
| <b>White Rose Objective</b>  | <b>NCETM link</b> |
| <b>Describe movement</b>   |                   |
| <b>Describe turns</b>  |                   |
| <b>Describe movement and turns</b>   |                   |
| <b>Making patterns with shapes</b>   |                   |

|   |                   |
|---|-------------------|
| <b>SUMMER</b>   |                   |
| <b>Time</b>   |                   |
| <b>NEW VOCABULARY</b>   |                   |
| <b>quarter past/to, 5 past, 10 past, twenty to etc, start, duration, end, interval, how long...? When did it start /end /finish...?, seconds;</b> |                   |
| <b>White Rose Objective</b>   | <b>NCETM link</b> |
| <b>O'clock and half past</b>  |                   |
| <b>Quarter past and quarter to</b>  |                   |
| <b>Telling time to 5 minutes</b>  |                   |
| <b>Hours and days</b>   |                   |
| <b>Find durations of time</b>   |                   |
| <b>Compare durations of time</b>  |                   |