## Mathematics Reception - Long Term Plan

## Statutory Guidance from the EYFS Framework for Mathematics:

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10 , the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

|  | Autumn 1 | Autumn 2 | Soring 1 | Spring 2 | Summer 1 | Summer 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Potential Themes/ Interests of children | Starting School Autumn / Halloween Family People who help us Teddy bears | Harvest - Pumpkins Christmas Around the World Celebrations including Diwali | Winter <br> Arctic environments Journeys / The world Chinese New Year Big School's bird watch | Growing up - babies, generations <br> Health inc. oral health Spring Easter | Life Cycles - butterflies, beans, sunflower Outdoors Gardening | Summer Hot environments Rock pools Mermaids / Pirates Seaside |
| Possible Celebrations \& Experiences | Starting School, Halloween, Autumn, Black History Month, Fire service visit | Diwali, Bonfire Night, Children in Need, Remembrance Day, Advent, Christmas, Christmas Nativity | Valentine's Day, Lunar New Year / Chinese <br> New Year, NSPCC <br> Numbers day, Safer Internet Day | World Book Day, Comic Relief, Mother's Day, Pancake Day, World Art Day, Easter | International Museum Day, World Biscuit Day, World Food Safety day | Father's Day , Sports Day, Transition, Assessment |
| White Rose Maths EYFS Overview <br> Coverage for the Year: | Getting to Know you: settling in, routines, exploring provision. Match, Sort and Compare : match, sort and compare amounts. Talk about Measure and Patterns:Compare size, mass and capacity and patterns. <br> It' me 1,2,3!: <br> Representing, comparing and composing 1,2 and 3. | Circles and <br> Triangles:Exploring circles, triangles and positional language. 1,2,3,4,5: Representing numbers to 5 . One more and one less to 5 . Shapes with 4 sides | Alive in 5: Introducing 0. Comparing numbers to 5 . Composition of 4 \& 5 . Comparing mass and capacity. <br> Mass and Capacity: including balance. <br> Growing 6, 7,8: <br> Representing numbers to <br> 8. One more and one less to 8 . | Length and Height, Time. Building 9 and 10: Counting to 9 and 10, 3D Shapes, spatial awareness and patterns. | To 20 and Beyond: Building numbers beyond 10. Counting patterns beyond 10. Manipulate, Compose and Decompose: spatial reasoning, match, rotate, manipulate shapes. <br> First, then, now: Adding more, taking away. Spatial reasoning, compose and decompose. | Sharing and Grouping: doubling, sharing, grouping, odd and even. Spatial reasoning, visualising and building. Visualise, Build and Map: deepening understanding, patterns and relationships, spatial reasoning, mapping. Make Connections |


|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Suggested Texts - Fiction and Non-Fiction |  |  |  |  |  |  |
| The Reception <br> Year provides the foundation for mathematical skills the children will build upon in Year one. | Number and place value (within 20): use the language of: equal to, more than, less than (fewer), most, least Identify and represent numbers using objects and pictorial representations including the number line | Addition and subtraction (within 20) <br> (addition and subtraction Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) sign <br> Read and write numbers from 1 to 20 in numerals and words | Number and place value (within 100): Begin to recognise the place value of each digit in a twodigit number (tens, ones) | Fractions: Recognise, find and name a half as one of two equal parts of an object, shape or quantity | Fractions: Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | Multiplication and Division: count in multiples of twos, fives and tens solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations |
| Where are they going? Y1 <br> Expectations: | Comparing \& Estimating: compare, describe and solve practical problems for: lengths and heights, mass/weight, time | Number Bonds: <br> Represent and use number bonds and related subtraction facts within 20 | Shape: Recognise and name common 2-D and 3-D shapes, | Positional Language: <br> Describe position, direction and movement, including half, quarter and threequarter turns | Money: Recognise and know the value of different denominations of coins and notes | Time: Tell the time to the hour and half past the hour Recognise and use language relating to dates, including days of the week, weeks, months and years |

## Mathematics - Reception Long Term Plan

\section*{| Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |}


| Ongoing |
| :---: |
| Mathematical |
| skills |
| developed |
| throughout the |
| year |

- Linking the number symbol with its cardinal number value.
- Counting beyond ten.
- Comparing numbers.
- Understanding the 'one more/one less than' relationship between consecutive numbers.
- Comparing length, weight, and capacity.
- Select, rotate, and manipulate shapes to develop spatial reasoning skills.
- Composing and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.

| $\begin{aligned} & \text { Curbar } \\ & \text { Mimon } \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Mathematical knowledge regularly revisited <br> Intent <br> Vocabulary Implementation | Routines, comparing measures, verbally counting including when singing rhymes. Happen, now, next, after that, smaller, larger, smallest, largest, number names, words to numbers songs. <br> Using a visual timetable to explain the day, water tray exploration, balance pan exploration, singing number rhyme songs daily including props and actions - fingers. | Count objects, actions, and sounds. Introduction of Subitising. <br> Number names, count, without counting, how many. <br> Model counting objects correctly and incorrectly. Count my claps. Count how many coins in the pot with eyes closed. Dot cards to subitise with. | Subitising to 5. 2D shapes, One more and one less. <br> Count, without counting, how many, shape, shape names, flat, sides, corners, smooth, one more, one less, adding one, taking one, bigger, smaller. Dot cards to subitise with, $2 d$ shapes in provision and around the classroom for children to find, number lines in the classroom for children to model one more and one less, starter activities to recap prior learning. | Explore the composition of numbers to 8 Subitise (intro to conceptual) Recall number bonds 0-8. <br> Number, number names, addition, count, without counting, how many, number bonds. Dot cards to subitise with, tens frames with numbers to 8 for children to use, exploration of each number - working systematically to find all the ways to make each number. | Explore the composition of numbers to 10 <br> Subitise (conceptual) Automatic recall number bonds 0-10 Number, number names, count, addition, larger, smaller, odd, even, more, less, number bonds. <br> Continue to access mathematical continuous provision tens frames, numicon, using Subitising dot plates and images, number bond songs and using fingers to find answers. | Explore the composition of numbers beyond 10 . Subitise (conceptual) Automatic recall number bonds 0-10 <br> Number, number names, count, addition, larger, smaller, odd, even, more, less, number bonds. <br> Continue to access mathematical <br> continuous provision tens frames, numicon, using Subitising dot plates and images, number bond songs and using fingers to find answers. |

