

NCETM Mastering Number – Reception.

| Strand/<br>Half-term                         | Subitising  | Cardinality, ordinality and counting   | Composition  | Comparison   |
|--|---|--|--|--|
| <p><b>1</b></p> <p><b>Children will:</b></p> | <ul style="list-style-type: none"> <li>perceptually subitise within 3</li> <li>identify sub-groups in larger arrangements</li> <li>create their own patterns for numbers within 4</li> <li>practise using their fingers to represent quantities which they can subitise</li> <li>experience subitising in a range of contexts, including temporal patterns made by sounds.</li> </ul> | <ul style="list-style-type: none"> <li>relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set</li> <li>have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song</li> <li>have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting</li> <li>have opportunities to develop an understanding that anything can be counted, including actions and sounds</li> <li>explore a range of strategies which support accurate counting.</li> </ul> | <ul style="list-style-type: none"> <li>see that all numbers can be made of 1s</li> <li>compose their own collections within 4.</li> </ul>  | <ul style="list-style-type: none"> <li>understand that sets can be compared according to a range of attributes, including by their numerosity</li> <li>use the language of comparison, including ‘more than’ and ‘fewer than’</li> <li>compare sets ‘just by looking’.</li> </ul>  |
| <p><b>2</b></p> <p><b>Children will:</b></p> | <ul style="list-style-type: none"> <li>continue from first half-term</li> <li>subitise within 5, perceptually and conceptually, depending on the arrangements.</li> </ul>   | <ul style="list-style-type: none"> <li>continue to develop their counting skills</li> <li>explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand</li> <li>begin to count beyond 5</li> <li>begin to recognise numerals, relating these to quantities they can subitise and count.</li> </ul>  | <ul style="list-style-type: none"> <li>explore the concept of ‘wholes’ and ‘parts’ by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot</li> <li>explore the composition of numbers within 5.</li> </ul> | <ul style="list-style-type: none"> <li>compare sets using a variety of strategies, including ‘just by looking’, by subitising and by matching</li> <li>compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.</li> </ul> |

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| <p><b>3</b></p> <p><b>Children will:</b></p> | <ul style="list-style-type: none"> <li>increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements</li> <li>explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part</li> <li>experience patterns which show a small group and '1 more'</li> <li>continue to match arrangements to finger patterns.</li> </ul>   | <ul style="list-style-type: none"> <li>continue to develop verbal counting to 20 and beyond</li> <li>continue to develop object counting skills, using a range of strategies to develop accuracy</li> <li>continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10</li> <li>order numbers, linking cardinal and ordinal representations of number.</li> </ul> | <ul style="list-style-type: none"> <li>continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5</li> <li>explore the composition of 6, linking this to familiar patterns, including symmetrical patterns</li> <li>begin to see that numbers within 10 can be composed of '5 and a bit'.</li> </ul> | <ul style="list-style-type: none"> <li>continue to compare sets using the language of comparison, and play games which involve comparing sets</li> <li>continue to compare sets by matching, identifying when sets are equal</li> <li>explore ways of making unequal sets equal.</li> </ul> |
| <p><b>4</b></p> <p><b>Children will:</b></p> | <ul style="list-style-type: none"> <li>explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'.</li> </ul>   | <ul style="list-style-type: none"> <li>continue to consolidate their understanding of cardinality, working with larger numbers within 10</li> <li>become more familiar with the counting pattern beyond 20.</li> </ul>  | <ul style="list-style-type: none"> <li>explore the composition of odd and even numbers, looking at the 'shape' of these numbers</li> <li>begin to link even numbers to doubles</li> <li>begin to explore the composition of numbers within 10.</li> </ul>   | <ul style="list-style-type: none"> <li>compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.</li> </ul>  |
| <p><b>5</b></p> <p><b>Children will:</b></p> | <ul style="list-style-type: none"> <li>continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns</li> <li>use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number</li> <li>subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10</li> <li>be encouraged to identify when it is appropriate to count and when groups can be subitised.</li> </ul> | <ul style="list-style-type: none"> <li>continue to develop verbal counting to 20 and beyond, including counting from different starting numbers</li> <li>continue to develop confidence and accuracy in both verbal and object counting.</li> </ul>   | <ul style="list-style-type: none"> <li>explore the composition of 10.</li> </ul>  | <ul style="list-style-type: none"> <li>order sets of objects, linking this to their understanding of the ordinal number system.</li> </ul>  |
| <p><b>6</b></p>                              | <p>In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.</p>   |   |   |   |

## Reception Medium Term Plan – Autumn

**This is an overview of topics and knowledge. For number, NCETM materials will be used daily. This grid helps to organise other areas of maths.**

| Week | Topic                         | Objectives  | EYFS Development Matters- Knowledge grid  |
|------|-------------------------------|---|---|
| 1    | Counting                      | Recite numbers to 10, then 20.<br>Say and use number in songs, rhymes and stories.<br>Count up to objects to 10 in a line, or by moving them.<br>Count out up to 10 objects from a larger set (know when to stop!). | Know how to count verbally beyond 5.<br>Know how to count verbally beyond 10.<br>Know how to count verbally beyond 20.<br>Know how to accurately count items to 5 with one-to-one correspondence.<br>Know how to accurately count items to 10 with one-to-one correspondence.<br>Correctly count sounds and actions, as well as objects.<br>Show a secure understanding of the ‘cardinal principle’ (knows the last number reached when counting tells you the total).<br>Know how to subitise up to 3.   |
| 2    | Counting                      | Begin to match numerals to the number in a set.<br>Order numerals to 10.  | Know how to subitise up to 5.<br>Know how to show ‘finger numbers’ up to 5.<br>Know how to link numeral to amounts up to 5.<br>Know how to link numeral to amounts up to 10.  |
| 3    | Shape and space               | Describe the shape and size of shapes.<br>Name circles, squares and triangles.<br>Describe position.  | Can talk about some common 2D shapes using informal and mathematical language.<br>Can talk about some common 3D shapes using informal and mathematical language.<br>Can select shapes appropriately for tasks.<br>Know how to combine shapes to make new ones.<br>Know how to understand that shapes can be decomposed into smaller ones within them.<br>Explore shapes and spatial awareness by rotating and manipulating shapes.<br>Understand positional language.<br>Know how to use positional language.                                     |
| 4    | Pattern                       | Continue a repeating pattern with two colours/shapes/objects.   | Know how to describe and discuss a route.<br>Know how to patterns and mathematical relationships<br>Know how to talk about patterns in the environment using informal language.<br>Know how to continue a simple AB pattern.<br>Know how to copy and create a simple AB pattern.<br>Know how to notice and correct an error in a simple pattern.<br>Know how to continue and copy a more complex pattern. E.g. ABC, ABB, ABBC<br>Know how to create a more complex pattern.<br>Know how to notice and correct an error in a more complex pattern. |
| 5    | Counting<br>Adding (one more) | Count on from any number to 10.<br>Say the next number (i.e. say the number after a given number up to 10 without counting from 1).<br>Read the corresponding addition.   | Know how to count verbally beyond 5.<br>Know how to count verbally beyond 10.<br>Know how to count verbally beyond 20.<br>Know how to accurately count items to 5 with one-to-one correspondence.<br>Know how to accurately count items to 10 with one-to-one correspondence.<br>Know how to correctly count sounds and actions, as well as objects.  |

**NCETM Mastering Number – Reception.**

| Week | Topic                    | Objectives   | EYFS Development Matters- Knowledge grid   |
|------|--------------------------|--|--|
|      |                          |  | <p>Show a secure understanding of the ‘cardinal principle’ (knows the last number reached when counting tells you the total).</p> <p>Know how to subitise up to 3.</p> <p>Know how to subitise up to 5.</p> <p>Know how to show ‘finger numbers’ up to 5.</p> <p>Know how to link numeral to amounts up to 5.</p> <p>Know how to link numeral to amounts up to 10.</p> <p>Know how to use ‘more than’ and ‘fewer than’ to compare quantities.</p> <p>Know how to compare quantities up to 10 and say whether one is greater than, less than or the same as the other.</p> <p>Know how to understand ‘one more than/one less than’.</p>   |
| 6    | Addition (story of five) | <p>Find different ways to partition sets of five objects.</p> <p>Read the corresponding addition.</p> <p>Early subtraction – Guess how many are hiding.</p>  | <p>Know how to count verbally beyond 5.</p> <p>Know how to count verbally beyond 10.</p> <p>Know how to count verbally beyond 20.</p> <p>Know how to accurately count items to 5 with one-to-one correspondence.</p> <p>Know how to accurately count items to 10 with one-to-one correspondence.</p> <p>Know how to correctly count sounds and actions, as well as objects.</p> <p>Show a secure understanding of the ‘cardinal principle’ (knows the last number reached when counting tells you the total).</p> <p>Know how to subitise up to 3.</p> <p>Know how to subitise up to 5.</p> <p>Know how to show ‘finger numbers’ up to 5.</p> <p>Know how to link numeral to amounts up to 5.</p> <p>Know how to link numeral to amounts up to 10.</p> <p>Know how to solve real-life maths problems with numbers up to 5.</p> <p>Know the total of a larger set by subitising the groups within it and immediately combining them to find the total (conceptual subitising).</p> <p>Know how to demonstrate an understanding of the composition of numbers to 5.</p> <p>Know how to automatically recall number bonds to 5.</p> |
| 7    | Counting                 | <p>Count up to 10 objects which can’t be moved.</p> <p>Match numerals to the number in a set.</p> <p>Understand zero to describe an empty set.</p> <p>Rehearse counting back from 10 to 0, including in songs, stories and rhymes.</p> <p>Count actions.</p> | <p>Know how to count verbally beyond 5.</p> <p>Know how to count verbally beyond 10.</p> <p>Know how to count verbally beyond 20.</p> <p>Know how to accurately count items to 5 with one-to-one correspondence.</p> <p>Know how to accurately count items to 10 with one-to-one correspondence.</p> <p>Know how to correctly count sounds and actions, as well as objects.</p> <p>Show a secure understanding of the ‘cardinal principle’ (knows the last number reached when counting tells you the total).</p> <p>Know how to subitise up to 3.</p> <p>Know how to subitise up to 5.</p> <p>Know how to show ‘finger numbers’ up to 5.</p> <p>Know how to link numeral to amounts up to 5.</p>  |

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| Week | Topic   | Objectives   | EYFS Development Matters- Knowledge grid   |
|------|---|--|--|
|      |   |  | <p>Know how to link numeral to amounts up to 10.<br/>           Know how to use 'more than' and 'fewer than' to compare quantities.<br/>           Know how to compare quantities up to 10 and say whether one is greater than, less than or the same as the other.<br/>           Understand 'one more than/one less than'.<br/>           Know how to solve real-life maths problems with numbers up to 5.<br/>           Know the total of a larger set by subitising the groups within it and immediately combining them to find the total (conceptual subitising).<br/>           Know how to demonstrate an understanding of the composition of numbers to 5.<br/>           Demonstrate an understanding of the composition of numbers to 10.<br/>           Automatically recall number bonds to 5.<br/>           Automatically recall some number bonds to 10.<br/>           Know how to apply knowledge of number bonds to recall some subtraction facts to 5.</p> |
| 8    | Time  | <p>Use days of the week in context, e.g. story.<br/>           Recognise a minute as unit of time.<br/>           Count actions carried out in a minute (less than 20).</p>  | <p>Know how to describe a sequence of events.<br/>           Know how to count verbally beyond 5.<br/>           Know how to count verbally beyond 10.<br/>           Know how to count verbally beyond 20.<br/>           Know how to accurately count items to 5 with one-to-one correspondence.<br/>           Know how to accurately count items to 10 with one-to-one correspondence.<br/>           Know how to correctly count sounds and actions, as well as objects.<br/>           Show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).</p>  |
| 9    | Measures weight   | <p>Begin to understand the terms 'heavy, light'<br/><br/>           Compare two weights using direct comparison; use language of heavier/ lighter<br/>           Use uniform non-standard units to measure weight.</p>                                   | <p>Know how to make direct comparisons between objects relating to size.<br/>           Begin to use units to compare size.<br/>           Know how to make direct comparisons between objects relating to length.<br/>           Begin to use units to compare length.<br/>           Know how to make direct comparisons between objects relating to weight.<br/>           Begin to use units to compare weight.<br/>           Know how to make direct comparisons between objects relating to capacity.<br/>           Begin to use units to compare capacity.<br/>           Know how to describe a sequence of events.</p>  |
| 9    | <p>Measures (height/ length)<br/><br/>           Counting and comparing numbers</p> | <p>Compare two heights using direct comparison; use language of taller and shorter/ longer and shorter<br/>           Use uniform non-standard units to measure items up to 10 units high/ long.<br/>           Put three heights/ lengths in order.</p> | <p>Know how to make direct comparisons between objects relating to size.<br/>           Begin to use units to compare size.<br/>           Know how to make direct comparisons between objects relating to length.<br/>           Begin to use units to compare length.<br/>           Know how to make direct comparisons between objects relating to weight.<br/>           Begin to use units to compare weight.<br/>           Know how to make direct comparisons between objects relating to capacity.<br/>           Begin to use units to compare capacity.<br/>           Know how to describe a sequence of events.</p>  |

**NCETM Mastering Number – Reception.**

| Week  | Topic                             | Objectives   | EYFS Development Matters- Knowledge grid  |
|-------|-----------------------------------|--|---|
|       |                                   | Compare two numbers/quantities, use the language of 'more' and 'less'.   |   |
| 10/11 | Money<br><br>'Real life' problems | Recognise coins of different values<br>Compare prices in pounds up to £10 (by making lines of pound coins).<br>Use money in role play (e.g. pound shop).<br>Solve practical problems involving counting or role play.<br>Use addition and subtraction in role play with money. | Know how to count verbally beyond 10.<br>Know how to count verbally beyond 20.<br>Know how to accurately count items to 5 with one-to-one correspondence.<br>Know how to accurately count items to 10 with one-to-one correspondence.<br>Know how to correctly count sounds and actions, as well as objects.<br>Show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).<br>Know how to subitise up to 3.<br>Know how to subitise up to 5.<br>Know how to show 'finger numbers' up to 5.<br>Know how to link numeral to amounts up to 5.<br>Know how to link numeral to amounts up to 10.<br>Know how to use 'more than' and 'fewer than' to compare quantities.<br>Know how to compare quantities up to 10 and say whether one is greater than, less than or the same as the other.<br>Understand 'one more than/one less than'.<br>Know how to solve real-life maths problems with numbers up to 5. |
| 12    | Shape/ measures (capacity)        | Begin to describe 3D shapes.<br>Use 3D shapes to print and make models.  | Can talk about some common 2D shapes using informal and mathematical language.<br>Can talk about some common 3D shapes using informal and mathematical language.<br>Can select shapes appropriately for tasks.<br>Know how to combine shapes to make new ones.<br>Understand that shapes can be decomposed into smaller ones within them.<br>Explore shapes and spatial awareness by rotating and manipulating shapes.<br>Understand positional language.<br>Know how to use positional language.<br>Know how to describe and discuss a route.<br>Know how to make direct comparisons between objects relating to capacity.<br>Begin to use units to compare capacity.  |

## Reception Medium Term Plan – Spring

This is an overview of topics and knowledge suggested on the Hamilton Trust planning grid. For number, NCETM materials will be used daily when we have access and planning will be updated. This grid helps to organise other areas of maths.

| Week | Topic                         | Objectives  | EYFS Development Matters- Knowledge grid  |
|------|-------------------------------|---|---|
| 1    | Counting                      | Recite numbers to 10, then 20.<br>Say and use number in songs, rhymes and stories.<br>Count up to objects to 10 in a line, or by moving them.<br>Count out up to 10 objects from a larger set (know when to stop!). | Know how to count verbally beyond 10.<br>Know how to count verbally beyond 20.<br>Know how to accurately count items to 5 with one-to-one correspondence.<br>Know how to accurately count items to 10 with one-to-one correspondence.<br>Know how to correctly count sounds and actions, as well as objects.<br>Know how to show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).  |
| 2    | Counting                      | Begin to match numerals to the number in a set.<br>Order numerals to 10.  | Know how to subitise up to 3.<br>Know how to subitise up to 5.<br>Know how to show 'finger numbers' up to 5.<br>Know how to link numeral to amounts up to 5.<br>Know how to link numeral to amounts up to 10.   |
| 3    | Shape and space               | Describe the shape and size of shapes.<br>Name circles, squares and triangles.<br>Describe position.  | Can talk about some common 2D shapes using informal and mathematical language.<br>Can talk about some common 3D shapes using informal and mathematical language.<br>Can select shapes appropriately for tasks.<br>Know how to combine shapes to make new ones.<br>Understand that shapes can be decomposed into smaller ones within them.<br>Explore shapes and spatial awareness by rotating and manipulating shapes.<br>Understand positional language.<br>Know how to use positional language. |
| 4    | Pattern                       | Continue a repeating pattern with two colours/shapes/objects.   | Know how to describe and discuss a route.<br>Talk about patterns in the environment using informal language.<br>Know how to continue a simple AB pattern.<br>Know how to copy and create a simple AB pattern.<br>Notice and correct an error in a simple pattern.<br>Know how to continue and copy a more complex pattern. E.g. ABC, ABB, ABBC<br>Know how to create a more complex pattern.<br>Notice and correct an error in a more complex pattern.  |
| 5    | Counting<br>Adding (one more) | Count on from any number to 10.<br>Say the next number (i.e. say the number after a given number up to 10 without counting from 1).<br>Read the corresponding addition.   | Know how to count verbally beyond 5.<br>Know how to count verbally beyond 10.<br>Know how to count verbally beyond 20.<br>Know how to accurately count items to 5 with one-to-one correspondence.<br>Know how to accurately count items to 10 with one-to-one correspondence.<br>Know how to correctly count sounds and actions, as well as objects.  |

**NCETM Mastering Number – Reception.**

| Week | Topic                    | Objectives   | EYFS Development Matters- Knowledge grid   |
|------|--------------------------|--|--|
|      |                          |  | <p>Show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).</p> <p>Know how to subitise up to 3.</p> <p>Know how to subitise up to 5.</p> <p>Know how to show 'finger numbers' up to 5.</p> <p>Know how to link numeral to amounts up to 5.</p> <p>Know how to link numerals to amounts up to 10.</p> <p>Know how to use 'more than' and 'fewer than' to compare quantities.</p> <p>Know how to compare quantities up to 10 and say whether one is greater than, less than or the same as the other.</p> <p>Understand 'one more than/one less than'.</p>  |
| 6    | Addition (story of five) | <p>Find different ways to partition sets of five objects.</p> <p>Read the corresponding addition.</p> <p>Early subtraction – Guess how many are hiding.</p>  | <p>Know how to count verbally beyond 5.</p> <p>Know how to count verbally beyond 10.</p> <p>Know how to count verbally beyond 20.</p> <p>Know how to accurately count items to 5 with one-to-one correspondence.</p> <p>Know how to accurately count items to 10 with one-to-one correspondence.</p> <p>Know how to correctly count sounds and actions, as well as objects.</p> <p>Show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).</p> <p>Know how to subitise up to 3.</p> <p>Know how to subitise up to 5.</p> <p>Know how to show 'finger numbers' up to 5.</p> <p>Know how to link numeral to amounts up to 5.</p> <p>Know how to link numeral to amounts up to 10.</p> <p>Know how to solve real-life maths problems with numbers up to 5.</p> <p>Know the total of a larger set by subitising the groups within it and immediately combining them to find the total (conceptual subitising).</p> <p>Know how to demonstrate an understanding of the composition of numbers to 5.</p> <p>Automatically recall number bonds to 5.</p> |
| 7    | Counting                 | <p>Count up to 10 objects which can't be moved.</p> <p>Match numerals to the number in a set.</p> <p>Understand zero to describe an empty set.</p> <p>Rehearse counting back from 10 to 0, including in songs, stories and rhymes.</p> <p>Count actions.</p> | <p>Know how to count verbally beyond 5.</p> <p>Know how to count verbally beyond 10.</p> <p>Know how to count verbally beyond 20.</p> <p>Know how to accurately count items to 5 with one-to-one correspondence.</p> <p>Know how to accurately count items to 10 with one-to-one correspondence.</p> <p>Know how to correctly count sounds and actions, as well as objects.</p> <p>Show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).</p> <p>Know how to subitise up to 3.</p> <p>Know how to subitise up to 5.</p> <p>Know how to show 'finger numbers' up to 5.</p> <p>Know how to link numeral to amounts up to 5.</p>  |

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| Week | Topic  | Objectives   | EYFS Development Matters- Knowledge grid   |
|------|--|--|--|
|      |  |  | <p>Know how to link numeral to amounts up to 10.<br/>           Know how to use 'more than' and 'fewer than' to compare quantities.<br/>           Know how to compare quantities up to 10 and say whether one is greater than, less than or the same as the other.<br/>           Know how to understand 'one more than/one less than'.<br/>           Know how to solve real-life maths problems with numbers up to 5.<br/>           Know the total of a larger set by subitising the groups within it and immediately combining them to find the total (conceptual subitising).<br/>           Know how to demonstrate an understanding of the composition of numbers to 5.<br/>           Know how to demonstrate an understanding of the composition of numbers to 10.<br/>           Automatically recall number bonds to 5.<br/>           Automatically recall some number bonds to 10.<br/>           Know how to apply knowledge of number bonds to recall some subtraction facts to 5.</p> |
| 8    | Measures (length)  | <p>Compare two lengths using direct comparison; use language of longer and shorter.<br/>           Use uniform non-standard units to measure items up to 10 units long.<br/>           Put three lengths in order.</p>   | <p>Know how to make direct comparisons between objects relating to size.<br/>           Begin to use units to compare size.<br/>           Know how to make direct comparisons between objects relating to length.<br/>           Begin to use units to compare length.<br/>           Know how to make direct comparisons between objects relating to weight.<br/>           Begin to use units to compare weight.<br/>           Know how to make direct comparisons between objects relating to capacity.<br/>           Begin to use units to compare capacity.<br/>           Know how to describe a sequence of events.</p>  |
| 9    | <p>Measures (height)</p> <p>Counting and comparing numbers</p> | <p>Compare two heights using direct comparison; use language of taller and shorter.<br/>           Use uniform non-standard units to measure items up to 10 units high.<br/>           Put three heights in order.<br/>           Compare two numbers/quantities, use the language of 'more' and 'less'.</p> | <p>Know how to make direct comparisons between objects relating to size.<br/>           Begin to use units to compare size.<br/>           Know how to make direct comparisons between objects relating to length.<br/>           Begin to use units to compare length.<br/>           Know how to make direct comparisons between objects relating to weight.<br/>           Begin to use units to compare weight.<br/>           Know how to make direct comparisons between objects relating to capacity.<br/>           Begin to use units to compare capacity.<br/>           Know how to describe a sequence of events.</p>  |
| 10   | Shape  | <p>Begin to describe 3D shapes.<br/>           Use 3D shapes to print and make models.</p>   | <p>Can talk about some common 2D shapes using informal and mathematical language.<br/>           Can talk about some common 3D shapes using informal and mathematical language.<br/>           Can select shapes appropriately for tasks.<br/>           Know how to combine shapes to make new ones.<br/>           Understand that shapes can be decomposed into smaller ones within them.</p>   |

**NCETM Mastering Number – Reception.**

| Week | Topic                                    | Objectives  | EYFS Development Matters- Knowledge grid   |
|------|--|---|--|
|      |  |   | <p>Explore shapes and spatial awareness by rotating and manipulating shapes.<br/>                     Understand positional language.<br/>                     Know how to use positional language.<br/>                     Know how to describe and discuss a route.</p>   |
| 11   | <p>Money</p> <p>'Real life' problems</p> | <p>Recognise £1 and £2 coins.<br/>                     Compare prices in pounds up to £10 (by making lines of pound coins).<br/>                     Use money in role play (e.g. pound shop).<br/>                     Solve practical problems involving counting or role play.</p> | <p>Know how to count verbally beyond 5.<br/>                     Know how to count verbally beyond 10.<br/>                     Know how to count verbally beyond 20.<br/>                     Know how to accurately count items to 5 with one-to-one correspondence.<br/>                     Know how to accurately count items to 10 with one-to-one correspondence.<br/>                     Know how to correctly count sounds and actions, as well as objects.<br/>                     Show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).<br/>                     Know how to subitise up to 3.<br/>                     Know how to subitise up to 5.<br/>                     Know how to show 'finger numbers' up to 5.<br/>                     Know how to link numeral to amounts up to 5.<br/>                     Know how to link numeral to amounts up to 10.<br/>                     Know how to use 'more than' and 'fewer than' to compare quantities.<br/>                     Know how to compare quantities up to 10 and say whether one is greater than, less than or the same as the other.<br/>                     Understand 'one more than/one less than'.<br/>                     Know how to solve real-life maths problems with numbers up to 5.</p> |
| 12   | Time                                     | <p>Use days of the week in context, e.g. story.<br/>                     Recognise a minute as unit of time.<br/>                     Count actions carried out in a minute (less than 20).</p>   | <p>Know how to describe a sequence of events. Counting<br/>                     Know how to count verbally beyond 5.<br/>                     Know how to count verbally beyond 10.<br/>                     Know how to count verbally beyond 20.<br/>                     Know how to accurately count items to 5 with one-to-one correspondence.<br/>                     Know how to accurately count items to 10 with one-to-one correspondence.<br/>                     Know how to correctly count sounds and actions, as well as objects.<br/>                     Know how to show a secure understanding of the 'cardinal principle' (knows the last number reached when counting tells you the total).</p>   |

## Reception Medium Term Plan – Summer

This is an overview of topics and knowledge suggested on the Hamilton Trust planning grid. For number, NCETM materials will be used daily when we have access and planning will be updated. This grid helps to organise other areas of maths

ELGs are highlighted in red

| Week | Topic   | Objectives   | EYFS Development Matters- Knowledge grid   |
|------|---|--|--|
| 1    | Counting<br>Odd and even numbers  | Recite numbers to 100<br>Count in 1s and 10s to 100<br><br>Be able to identify odd and even numbers  | <p><b>Numbers</b><br/>                     Know how to count objects, actions and sounds<br/>                     Know how to subitise<br/>                     Know how to link the number symbol with its cardinal number value<br/>                     Know how to count beyond 10<br/>                     Know how to compare numbers<br/>                     Know how to understand the 'one more than/one less than' relationship between consecutive numbers<br/>                     Know how to explore the composition of numbers to 10<br/>                     Know how to automatically recall number bonds for numbers 0-5 and some to 10</p> <p style="color: red;">Have a deep understanding of number to 10, including the composition of each number.<br/>                     Subitise up to 5<br/>                     Automatically recall number bonds up to 5 and some number bonds to 10, including double facts.<br/>                     Verbally count beyond 20, recognizing the pattern of the counting system.<br/>                     Compare quantities up to 10 in different contexts, recognizing when one quantity is greater than, less than or the same as the other quantity.<br/>                     Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p> |
| 2    | Counting<br>Addition-<br>composition of 5<br>revisited<br>Focus on the<br>composition of 10 | Recite numbers to 100<br><br>Be able to understand the composition of 5 and automatically recall.<br>Be able to understand the composition of 10 | <p><b>Numbers</b><br/>                     Know how to count objects, actions and sounds<br/>                     Know how to subitise<br/>                     Know how to link the number symbol with its cardinal number value<br/>                     Know how to count beyond 10<br/>                     Know how to compare numbers<br/>                     Know how to understand the 'one more than/one less than' relationship between consecutive numbers<br/>                     Know how to explore the composition of numbers to 10<br/>                     Know how to automatically recall number bonds for numbers 0-5 and some to 10</p> <p style="color: red;">Have a deep understanding of number to 10, including the composition of each number.<br/>                     Subitise up to 5<br/>                     Automatically recall number bonds up to 5 and some number bonds to 10, including double facts.<br/>                     Verbally count beyond 20, recognizing the pattern of the counting system.</p>  |
| 3    | Counting<br>Composition of<br>numbers<br>recap  | Recite numbers to 100<br><br>Be able to understand the composition of 5 and automatically recall.<br>Be able to understand the composition of 10 | <p style="color: red;">Have a deep understanding of number to 10, including the composition of each number.<br/>                     Know how to subitise up to 5<br/>                     Know how to automatically recall number bonds up to 5 and some number bonds to 10, including double facts.<br/>                     Know how to verbally count beyond 20, recognizing the pattern of the counting system.</p>   |

**NCETM Mastering Number – Reception.**

| Week | Topic   | Objectives   | EYFS Development Matters- Knowledge grid   |
|------|---|--|--|
| 4    | Investigate number patterns- recap on doubling facts.<br><br>Sharing equally. | Recite numbers to 100<br>Be able to identify doubles and be able to recall double facts<br>Be able to understand how quantities can be distributed evenly. | Know how to count objects, actions and sounds<br>Know how to subitise<br>Know how to link the number symbol with its cardinal number value<br>Know how to count beyond 10<br>Know how to compare numbers<br>Understand the 'one more than/one less than' relationship between consecutive numbers<br>Explore the composition of numbers to 10<br>Automatically recall number bonds for numbers 0-5 and some to 10<br><br><b>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</b>                      |
| 5    | Comparing quantities  | To able to recognize when one quantity is greater than, less than or the same as the other quantity.   | Know how to count objects, actions and sounds<br>Know how to subitise<br>Know how to link the number symbol with its cardinal number value<br>Know how to count beyond 10<br>Know how to compare numbers<br>Understand the 'one more than/one less than' relationship between consecutive numbers<br>Explore the composition of numbers to 10<br>Automatically recall number bonds for numbers 0-5 and some to 10<br><br><b>Compare quantities up to 10 in different contexts, recognizing when one quantity is greater than, less than or the same as the other quantity.</b>                     |
| 6    | Addition<br>Subtraction   | Find 1 more/ 1 less.<br>Subtract by counting back.   | Know how to count objects, actions and sounds<br>Know how to subitise<br>Know how to link the number symbol with its cardinal number value<br>Know how to count beyond 10<br>Know how to compare numbers<br>Know how to understand the 'one more than/one less than' relationship between consecutive numbers<br>Know how to explore the composition of numbers to 10<br>Automatically recall number bonds for numbers 0-5 and some to 10<br><b>Compare quantities up to 10 in different contexts, recognizing when one quantity is greater than, less than or the same as the other quantity.</b> |
| 7    | Measures (capacity)   | Direct comparisons.  | Know how to compare length, weight and capacity.   |
| 8    | Pattern   | To explore and represent patterns – complete a repeating pattern.<br>Explore patterns of numbers up to 10.   | Know how to count objects, actions and sounds<br>Know how to subitise<br>Know how to link the number symbol with its cardinal number value<br>Know how to count beyond 10<br>Understand the 'one more than/one less than' relationship between consecutive numbers<br>Know how to explore the composition of numbers to 10<br>Automatically recall number bonds for numbers 0-5 and some to 10<br><br><b>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</b>   |
| 9    | Counting and comparing numbers  | Recite numbers to 100<br>Read numbers to 100   | Know how to count objects, actions and sounds<br>Know how to subitise<br>Know how to link the number symbol with its cardinal number value   |

**NCETM Mastering Number – Reception.**

| <b>Week</b> | <b>Topic</b>          | <b>Objectives</b>   | <b>EYFS Development Matters- Knowledge grid</b>  |
|-------------|-----------------------|---|--|
|             |                       | Fill in missing numbers in a track to 20  | Know how to count beyond 10<br>Know how to compare numbers<br>Understand the 'one more than/one less than' relationship between consecutive numbers<br>Explore the composition of numbers to 10<br>Automatically recall number bonds for numbers 0-5 and some to 10<br><br>Compare quantities up to 10 in different contexts, recognizing when one quantity is greater than, less than or the same as the other quantity |
| 10          | 3D Shape<br>Direction | Describe cube, cuboid, cylinder, sphere, cone and pyramid.<br>Left and right.<br>Follow directions.                                   | Know how to select, rotate and manipulate shapes to develop spatial reasoning skills.<br>Know how to compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.   |
| 11          | Money                 | Recognise all coins.<br>Very simple addition and subtraction problems involving money.  | Know how to solve problems, including doubling, halving and sharing.<br>Begin to use everyday language related to money.<br>Know how to use everyday language to talk about size, weight, capacity, position, distance, time and money to solve problems.  |
| 12          | Time                  | Days of the week.<br>Count actions carried out in a minute (more than 20).<br>60 seconds in a minute.<br>Activities done in 1 minute. | Know how to use everyday language related to time.<br>Know how to order and sequence familiar events.<br>Know how to measure short periods of time in simple ways.<br>Know how use everyday language to talk about size, weight, capacity, position, distance, time and money to solve problems.   |