# **Harlington Lower School**

# **Reception Curriculum Progression**



# **Mathematics**

Mathematics – Statutory Framework for the Early Years Foundation Stage

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	Spring	Summer	
<u>Number</u>			
Master the curriculum: Just Like Me!	Master the curriculum: Alive in 5!	Master the curriculum: To 20 and Beyond	
<ul> <li>To match and sort objects</li> </ul>	To start using 0	To identify number patterns	
<ul> <li>To compare amounts</li> </ul>	<ul> <li>To compare numbers to 5</li> </ul>	<ul> <li>To match pictures to numerals</li> </ul>	
Master the curriculum: It's Me 1 2 3!	<ul> <li>To use composition of 4 &amp; 5</li> </ul>	<ul> <li>To build Numbers Beyond 10</li> </ul>	
<ul> <li>To represent 1, 2 &amp; 3</li> </ul>	Master the curriculum: Growing 6,7,8	<ul> <li>To order numerals to 20</li> </ul>	
<ul> <li>To compare 1, 2 &amp; 3</li> </ul>	<ul> <li>To subitise numbers to 6</li> </ul>	<ul> <li>To recognise counting patterns beyond 10</li> </ul>	
<ul> <li>To show composition of 1, 2, &amp; 3</li> </ul>	<ul> <li>To combine 2 amounts no greater than 8</li> </ul>		
	To make pairs		
Master the curriculum: Light and Dark	Master the curriculum: Building 9 & 10		

- To represent numbers to 5
- To look at one more and one less

- To independently count to 9 and then 10
- To independently compare numbers to 10
- To know number bonds to 5

### Master the curriculum: First, Then and Now

- To count on
- To add more
- To take away

#### Master the curriculum: Find My Pattern

- To double numbers to 5
- To share/halve numbers
- To group numbers
- To recognise odd and even numbers

#### Master the curriculum: One the Move

- To deepen their understanding of problem solving
- To spot patterns and relationship between numbers/objects
- To begin to know some number bonds to 10

#### **Mastering Number Programme**

- To know when to subitise
- To know when to count
- To be able to subitise different arrangements
- To be able to make different arrangements of numbers within 5
- To use a five frame
- To be able to spot smaller numbers 'hiding' inside larger numbers
- To explore different ways of representing on their fingers
- To hear and join in with the counting sequence
- To know that each number is made of one more than the previous number
- To develop counting skills and knowledge
- To compare sets of objects by matching
- To begin to develop the language of 'whole' when talking

### Mastering Number Programme

- To continue to develop their subitising skills for numbers within and beyond 5
- To know that quintinites are represented by a numeral
- To begin to identify missing parts for numbers within 5
- To be able to explore the structure of the numbers 6 and 7 as '5 and a bit' and
- To use a tens frame
- To focus on equal and unequal groups when comparing numbers
- To understand that two equal groups can be called a 'double' and connect this to finger patterns
- To be able to sort odd and even numbers according to their 'shape'
- To continue to develop their understanding of the counting sequence

## Mastering Number Programme

- To continue to develop their counting skills
- To be able to count larger sets, actions and sounds
- To explore a range of representations of numbers, including the 10-frame
- To notice how doubles can be arranged in a 10-frame
- To compare quantities and numbers, including sets of objects
- To continue to develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2
- To begin to generalise about 'one more than' and 'one less than' numbers within 10
- To continue to identify when sets can be subitised and when counting is necessary • To develop conceptual subitising skills including when using a rekenrek

	<ul> <li>To be able to order numbers and play track games</li> <li>To join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers</li> </ul> Numerical patterns	
<ul> <li>To begin to compare size, mass and capacity</li> <li>To begin to explore a simple pattern, in household objects and shapes</li> <li>To begin to use positional language</li> <li>To begin to talk about 2D shapes</li> <li>To make 2D shape pictures</li> <li>To sequence events</li> <li>To begin to know that the day is made up of morning, afternoon, evening and night</li> <li>To know days of the week</li> <li>To recognise coins 1p, 2p,5p, 10p</li> </ul>	<ul> <li>To begin to use a balance scale</li> <li>To begin to measure weight</li> <li>To be able to measure capacity</li> <li>To be able to compare size (height, length)</li> <li>To show awareness of space and describe using positional language</li> <li>To be able to recreate a simple pattern, with colour</li> <li>To begin to talk about 3D shapes</li> <li>To be able to make 3D shape prints</li> <li>To begin to look at time; O'clock</li> <li>To know months in the year</li> <li>To know the value of coins 1p, 2p,5p, 10p</li> </ul>	<ul> <li>To be able to rotate objects to get a different shape</li> <li>To be able to show spatial reasoning, with adult support</li> <li>To be able to recreate a pattern, using numbers, objects and shapes</li> <li>To be able to sort 2D and 3D shapes according to properties</li> <li>To be able to tell the time to the hour</li> <li>To recognise coins 20p, 50p, £1</li> </ul>