

**Nursery Long Term Plan**  
**Maths: Number and Numerical Patterns**

	Autumn	Spring	Summer
Mathematics Number	<p><b>Birth to three - babies, toddlers and young children will be learning to:</b></p> <ul style="list-style-type: none"> <li>Take part in finger rhymes with numbers. React to changes of amount in a group of up to three items.</li> <li>Compare amounts, saying 'lots', 'more' or 'same'. Develop counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.</li> <li>Count in everyday contexts, sometimes skipping numbers - '1-2- 3-5.'</li> </ul>	<p><b>Three and Four-Year Olds will be learning to</b></p> <ul style="list-style-type: none"> <li>Say one number for each item in order: 1,2,3,4,5.</li> <li>Show 'finger numbers' up to 5,</li> <li>Experiment with their own symbols and marks as well as numerals,</li> <li>Solve real world mathematical problems with numbers up to 5,</li> </ul>	<p><b>Three and Four-Year Olds will be learning to</b></p> <ul style="list-style-type: none"> <li>Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').</li> <li>Recite numbers past 5.</li> <li>Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'),</li> <li>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5,</li> <li>Compare quantities using language: 'more than', 'fewer than'.</li> </ul>
Numerical Patterns	<p><b>Birth to three - babies, toddlers and young children will be learning to:</b></p> <ul style="list-style-type: none"> <li>Combine objects like stacking blocks and cups.</li> <li>Put objects inside others and take them out again.</li> <li>Climb and squeeze themselves into different types of spaces.</li> <li>Build with a range of resources. Complete inset puzzles.</li> <li>Compare sizes, weights etc. using gesture and language - 'bigger/little/smaller', 'high/low', 'tall', 'heavy'.</li> <li>Notice patterns and arrange things in patterns.</li> </ul>	<p><b>Three and Four Year Olds will be learning to</b></p> <ul style="list-style-type: none"> <li>Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round',</li> <li>Describe a familiar route,</li> <li>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.</li> <li>Combine shapes to make new ones - an arch, a bigger triangle etc.</li> </ul>	<p><b>Three and Four Year Olds will be learning to</b></p> <ul style="list-style-type: none"> <li>Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round',</li> <li>Understand position through words alone,</li> <li>Discuss routes and locations, using words like 'in front of' and 'behind',</li> <li>Make comparisons between objects relating to size, length, weight and capacity,</li> <li>Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. Extend and create ABAB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating pattern. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'</li> </ul>