

## Key Learning in Mathematics – Nursery

Number – counting	Number – number sense	Measurement
<p><b>Rote counting</b></p> <ul style="list-style-type: none"> <li>Take part in finger rhymes with numbers (birth to 3)</li> <li>Recite numbers past 5 (3 &amp; 4 year olds)</li> <li>Rote count back from 5 to 1 or 0 (3 &amp; 4 year olds)</li> </ul> <p><b>Counting objects</b></p> <ul style="list-style-type: none"> <li>Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence (birth to 3)</li> <li>Understand that counting is to find out how many (birth to 3)</li> <li>Say one number for each item in order: 1, 2, 3, 4, 5 (3 &amp; 4 year olds)</li> <li>Know the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle') (3 &amp; 4 year olds)</li> <li>Count in everyday contexts, sometimes skipping numbers – '1-2-3-5' (birth to 3)</li> <li>Count reliably up to 5 in everyday contexts (3 &amp; 4 year olds)</li> <li>Show 'finger numbers' up to 5 (3 &amp; 4 year olds)</li> <li>Understand and use conservation of number (3 &amp; 4 year olds)</li> <li>Use the word 'zero' to represent 'none' (3 &amp; 4 year olds)</li> <li>Compare amounts, saying 'lots', 'more' or 'same' (birth to 3)</li> <li>Compare quantities using language: 'more than', 'fewer than' (3 &amp; 4 year olds)</li> <li>Fast recognition of up to 3 objects, without having to count them individually (subitising) (3 &amp; 4 year olds)</li> <li>Solve real world mathematical problems with numbers up to 5 (3 &amp; 4 year olds)</li> </ul>	<ul style="list-style-type: none"> <li>Partition a set of objects in different ways (3 &amp; 4 year olds)</li> <li>Know that numbers greater than 1 can be made in different ways (3 &amp; 4 year olds)</li> </ul> <p><b>Number – number recognition</b></p> <ul style="list-style-type: none"> <li>Recognise and identify numerals 0 to 5 (3 &amp; 4 year olds)</li> <li>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 (3 &amp; 4 year olds)</li> </ul> <p><b>Number – graphics</b></p> <ul style="list-style-type: none"> <li>Experiment with their own symbols and marks as well as numerals (3 &amp; 4 year olds)</li> <li>Represent and explain their thinking in their own ways (birth to 3)</li> </ul> <p><b>Number – calculating</b></p> <ul style="list-style-type: none"> <li>React to changes of amount in a group of up to three items (birth to 3)</li> <li>Understand the concept of addition by practically combining sets of objects to find how many (3 &amp; 4 year olds)</li> <li>Understand the concept of subtraction by practically removing one amount from within another to find how many are left (3 &amp; 4 year olds)</li> <li>In real life contexts find one more and one less than a given number (3 &amp; 4 year olds)</li> <li>In real life contexts add two single-digit numbers totalling within 5, using practical equipment (3 &amp; 4 year olds)</li> <li>In real life contexts subtract a single-digit number from a number up to 5, using practical equipment (3 &amp; 4 year olds)</li> </ul>	<p><b>Distance</b></p> <ul style="list-style-type: none"> <li>Describe and compare sizes using gesture and language – 'bigger/little/smaller', 'high/low', 'tall', (birth to 3)</li> <li>Make comparisons between objects relating to size, length and height e.g. longer / shorter; wider / narrower; taller / shorter (3 &amp; 4 year olds)</li> <li>Find an object of similar length/width/height (3 &amp; 4 year olds)</li> </ul> <p><b>Weight</b></p> <ul style="list-style-type: none"> <li>Describe and compare weights using gesture and language – 'heavy' (birth to 3)</li> <li>Make comparisons between objects relating to weight e.g. heavier/lighter (3 &amp; 4 year olds)</li> </ul> <p><b>Volume/capacity</b></p> <ul style="list-style-type: none"> <li>Use language of full and empty to describe the amount in different containers (birth to 3)</li> <li>Make comparisons between objects relating to capacity e.g. more/less (3 &amp; 4 year olds)</li> </ul> <p><b>Money</b></p> <ul style="list-style-type: none"> <li>Understand that we need to pay for goods (3 &amp; 4 year olds)</li> <li>Talk about things they want to spend their money on (3 &amp; 4 year olds)</li> <li>Talk about different ways we can pay for things (3 &amp; 4 year olds)</li> <li>Recognise that there are different coins and notes (3 &amp; 4 year olds)</li> </ul> <p><b>Time</b></p> <ul style="list-style-type: none"> <li>Talk about significant times of the day, e.g. home time, lunch time, snack time, bed time, etc. (birth to 3)</li> <li>Understand and use language – before, after, yesterday, today, tomorrow (3 &amp; 4 year olds)</li> <li>Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' (3 &amp; 4 year olds)</li> <li>Know some names of the days of the week (3 &amp; 4 year olds)</li> </ul>
<p><b>Shape</b></p> <ul style="list-style-type: none"> <li>Combine objects like stacking blocks and cups (birth to 3)</li> <li>Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round' (3 &amp; 4 year olds)</li> <li>Know that shapes can appear in different ways and be different sizes (3 &amp; 4 year olds)</li> <li>Build with a range of resources (birth to 3)</li> <li>Complete inset puzzles (birth to 3)</li> <li>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. (3 &amp; 4 year olds)</li> <li>Combine shapes to make new ones – an arch, a bigger triangle etc. (3 &amp; 4 year olds)</li> </ul>	<p><b>Space</b></p> <ul style="list-style-type: none"> <li>Put objects inside others and take them out again (birth to 3)</li> <li>Climb and squeezing selves into different types of spaces (birth to 3)</li> <li>Understand position through words alone – for example, "The bag is under the table," – with no pointing (3 &amp; 4 year olds)</li> <li>Describe a familiar route (3 &amp; 4 year olds)</li> <li>Discuss routes and locations, using words like 'in front of' and 'behind' (3 &amp; 4 year olds)</li> <li>Notice patterns and arrange things in patterns (birth to 3)</li> <li>Talk about and identifies the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. (3 &amp; 4 year olds)</li> <li>Extend and create ABAB patterns – stick, leaf, stick, leaf (3 &amp; 4 year olds)</li> <li>Notice and correct an error in a repeating pattern (3 &amp; 4 year olds)</li> </ul>	
<p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>Sort objects and say what features they have in common (3 &amp; 4 year olds)</li> </ul>		