



## EYFS Progression in Maths



Nursery	3 and 4-year-olds will be learning to:	Examples of how to support this:
<p><b>Mathematics</b></p> <p><b>Nursery maths is guided by the Birth to 5 Matters Guidance.</b></p>	<p>Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').</p> <p>Recite numbers past 5.</p> <p>Say one number for each item in order: 1,2,3,4,5.</p> <p>Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').</p> <p>Show 'finger numbers' up to 5.</p> <p>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</p>	<p><i>Point to small groups of two or three objects: "Look, there are two!"</i></p> <p><i>Occasionally ask children how many there are in a small set of two or three.</i></p> <p><i>Regularly say the counting sequence, in a variety of playful contexts, inside and outdoors, forwards and backwards, sometimes going to high numbers, eg: hide and seek, rocket-launch countdowns.</i></p> <p><i>Count things and then repeat the last number. For example: "1, 2, 3 – 3cars".</i></p> <p><i>Point out the number of things whenever possible; so, rather than just 'chairs', 'apples' or 'children', say 'two chairs', 'three apples', 'four children'.</i></p> <p><i>Ask children to get you several things and emphasise the total number in your conversation with the child.</i></p> <p><i>Use small numbers to manage the learning environment. Suggestions: have a pot labelled '5 pencils' or a crate for '3 trucks'. Draw children's attention to these throughout the session and especially at tidy-up time: "How many pencils should be in this pot?" or "How many have we got?" etc.</i></p>
	<p>Experiment with their own symbols and marks as well as numerals.</p> <p>Solve real world mathematical problems with numbers up to 5.</p> <p>Compare quantities using language: 'more than', 'fewer than'.</p>	<p><i>Encourage children in their own ways of recording (for example) how many balls they managed to throw through the hoop. Provide numerals nearby for reference. Suggestions: wooden numerals in a basket or a number track on the fence.</i></p> <p><i>Discuss mathematical ideas throughout the day, inside and outdoors. Suggestions:</i></p> <ul style="list-style-type: none"> <li>• <i>"I think Jasmin has got more crackers..."</i></li> <li>• <i>support children to solve problems using fingers, objects and marks: "There are four of you, but there aren't enough chairs..."</i></li> <li>• <i>draw children's attention to differences and changes in amounts, such as those in stories like 'The Enormous Turnip'.</i></li> </ul>
	<p>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'.</p>	<p>Encourage children to play freely with blocks, shapes, shape puzzles and shape-sorters.</p> <p>Sensitively support and discuss questions like: "What is the same and what is different?"</p> <p>Encourage children to talk informally about shape properties using words like 'sharp corner', 'pointy' or 'curvy'. Talk about shapes as you play with them: "We need a piece with a straight edge."</p>
	<p>Understand position through words alone – for example, "The bag is under the table," – with no pointing.</p> <p>Describe a familiar route.</p> <p>Discuss routes and locations, using words like 'in front of' and 'behind'.</p>	<p>Discuss position in real contexts. Suggestions: how to shift the leaves off a path or sweep water away down the drain.</p> <p>Use spatial words in play, including 'in', 'on', 'under', 'up', 'down', 'besides' and 'between'. Suggestion: "Let's put the troll under the bridge and the billy goat beside the stream."</p> <p>Take children out to shops or the park: recall the route and the order of things seen on the way.</p> <p>Set up obstacle courses, interesting pathways and hiding places for children to play with freely. When appropriate, ask children to describe their route and give directions to each other.</p> <p>Provide complex train tracks, with loops and bridges, or water-flowing challenges with guttering that direct the flow to a water tray, for children to play freely with.</p> <p>Read stories about journeys, such as 'Rosie's Walk'.</p>
	<p>Make comparisons between objects relating to size, length, weight and capacity.</p>	<p>Provide experiences of size changes. Suggestions: "Can you make a puddle larger?", "When you squeeze a sponge, does it stay small?", "What happens when you stretch dough, or elastic?"</p> <p>Talk with children about their everyday ways of comparing size, length, weight and capacity. Model more specific techniques, such as lining up ends of lengths and straightening ribbons, discussing accuracy: "Is it exactly...?"</p>



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	<p>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc.</p> <p>Combine shapes to make new ones – an arch, a bigger triangle, etc.</p>	<p>Provide a variety of construction materials like blocks and interlocking bricks. Provide den-making materials. Allow children to play freely with these materials, outdoors and inside. When appropriate, talk about the shapes and how their properties suit the purpose.</p> <p>Provide shapes that combine to make other shapes, such as pattern blocks and interlocking shapes, for children to play freely with. When appropriate, discuss the different designs that children make.</p> <p>Occasionally suggest challenges, so that children build increasingly more complex constructions.</p> <p>Use tidy-up time to match blocks to silhouettes or fit things in containers, describing and naming shapes.</p> <p>Suggestion: “Where does this triangular one /cylinder /cuboid go?”</p>
	<p>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.</p> <p>Extend and create ABAB patterns – stick, leaf, stick, leaf.</p> <p>Notice and correct an error in a repeating pattern.</p> <p>Begin to describe a sequence of events, real or fictional, using words such as ‘first’, ‘then...’</p>	<p>Provide patterns from different cultures, such as fabrics.</p> <p>Provide a range of natural and everyday objects and materials, as well as blocks and shapes, for children to play with freely and to make patterns with. When appropriate, encourage children to continue patterns and spot mistakes.</p> <p>Engage children in following and inventing movement and music patterns, such as clap, clap, stamp.</p> <p>Talk about patterns of events, in cooking, gardening, sewing or getting dressed. Suggestions:</p> <ul style="list-style-type: none"> <li>• ‘First’, ‘then’, ‘after’, ‘before’</li> <li>• “Every day we...”</li> <li>• “Every evening we...”</li> </ul> <p>Talk about the sequence of events in stories.</p> <p>Use vocabulary like ‘morning’, ‘afternoon’, ‘evening’ and ‘night-time’, ‘earlier’, ‘later’, ‘too late’, ‘too soon’, ‘in a minute’.</p> <p>Count down to forthcoming events on the calendar in terms of number of days or sleeps. Refer to the days of the week, and the day before or day after, ‘yesterday’ and ‘tomorrow’.</p>



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Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<i>Theme</i>	<i>Marvellous Me!</i>	<i>Let's Celebrate</i>	<i>Around the world!</i>	<i>Once upon a Time</i>	<i>Amazing Animals! (Farm, food and growing)</i>	<i>Fun at the Seaside!</i>
<i>Focus Topics</i>	<i>Starting School My New Class New Beginnings Ourselves My Body How have I changed? My Family Being Kind</i>	<i>Celebrations Space Light and Dark Autumn</i>	<i>Winter Polar Regions Climates Contrasting Environments Hibernation Where do you live? Customs around the world.</i>	<i>The Little Red Hen The Magic Porridge Pot Signs of Spring Fantasy Creatures</i>	<i>Farm Healthy Eating Growing Life Cycles Animals around the world Animal Patterns Habitats</i>	<i>Underwater Worlds Travel Transport At the Seaside</i>
<p><b>Mathematics</b></p> <p><b>Shaded content indicates use of WR curriculum schemes.</b></p> <p><b>All others follow the Mastering Number programme. Please see also our 'Progression in Number Fact Fluency and Times Tables document' too.</b></p>	<p><b>Mathematical Experiences</b></p> <p>Counting rhymes and songs</p> <p>Classifying objects based on one attribute</p> <p>Matching equal and unequal sets</p> <p>Subitising</p> <p>Ordering objects and sets</p> <p>Introduce manipulatives</p> <p>Number recognition</p> <p>2D shape recognition</p> <p><b>Pattern and early number</b></p> <p>Recognise numbers in the environment.</p> <p>A 'number of the week'</p>	<p><b>Numbers within 6:</b></p> <p>Number bonds to 5</p> <p>Count up to six objects.</p> <p>One more and one fewer.</p> <p>Order numbers 1 to 6</p> <p>Conservation of numbers within six.</p> <p><b>Addition and subtraction within 6</b></p> <p>Explore zero.</p> <p><b>Measures</b></p> <p>Estimate, order, compare, discuss and explore capacity, weight and lengths.</p> <p><b>Shape and sorting</b></p> <p>Describe and sort 2-D and 3D shapes</p> <p>Describe position</p> <p><b>Calendar and Time</b></p> <p>Days of the week</p> <p>Seasons</p> <p>Sequencing daily events</p>	<p><b>Numbers within 10</b></p> <p>Count up to ten objects</p> <p>Represent, order and explore numbers to ten.</p> <p>One more or fewer, one greater</p> <p>Subitising to 5</p> <p>Odd and even numbers</p> <p>Addition and subtraction within 10</p>	<p><b>Numbers within 20</b></p> <p>Count up to 10 objects</p> <p>Represent, order and explore numbers up to 20.</p> <p>One more and one fewer</p> <p>Odd and even numbers</p> <p><b>Grouping and sharing</b></p> <p>Counting and sharing into equal groups</p> <p>Grouping into fives and tens</p> <p>Relationship between grouping and sharing</p> <p><b>Doubling and halving</b></p> <p>&amp; the relationship between them.</p>	<p><b>Addition and Subtraction within 20</b></p> <p>Addition as counting on and subtraction as taking away.</p> <p>Comparing 2 amounts recognising when one quantity is greater than, less than or the same as the other quantity.</p> <p><b>Shape and pattern</b></p> <p>Describe and sort 2D and 3D shapes</p> <p>Recognise, complete and create patterns.</p> <p><b>Money</b></p> <p>Coin recognition and values.</p> <p>Combinations to total 10p</p> <p><b>Measures</b></p> <p>Describe capacities, Compare volumes, Compare weights</p> <p>Estimate, compare and order lengths</p>	<p><b>Have a deep understanding of numbers within 10 including the composition of each number.</b></p> <p><b>Begin to have a deeper understanding of numbers within 20.</b></p> <p>Verbally count beyond 20</p> <p>One more, one less</p> <p>Estimate and counting</p> <p>Grouping and sharing</p> <p>Odd numbers and even numbers</p> <p><b>Subitise up to 5</b></p> <p>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10 including doubling facts.</p>