



# Curriculum Sequence

## Mathematics

Mathematics is a Specific Area in the Early Years Foundation Stage Curriculum.

We know that young children follow a natural developmental process when learning mathematical concepts and ideas. Our sequence of learning supports this and ensures that children experience a broad and balanced delivery of mathematical approaches and ideas.

Mathematics is everywhere! We believe mathematics in the early years should be real, hands-on and multisensory. Children develop their mathematical thinking when they can touch, feel and weigh concrete resources. The learning environment is full of awe inspiring, authentic resources, such as sparkling jewels to collect, huge pumpkins to transport and beautiful autumn resources to sort and make patterns with.

We aim to empower our children to believe that maths is fun and that they are able to be capable and confident mathematicians. Likewise, we support parents and carers to believe in their own abilities as we support them to understand what maths looks like in the early years. We invite parents to attend an 'Everyday Maths' workshop, where the parents learn and get involved in what we do in our setting to teach and develop their child's learning in maths and how they can support this at home. It opens the parents' eyes to how practical, fun and accessible to all it is.



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Maths: Number			
	Our Sequence of Learning	Our Unique Approach	Notes
<p>"I am a keen explorer"</p> <p><b>Two Year Old end point</b></p> <p><b>Vocabulary: just one/only one, one more, two, three, counting, number, how many?</b></p>	<ul style="list-style-type: none"> <li>Children say numbers spontaneously through play but without real meaning.</li> <li>Children are curious about numbers in the environment.</li> <li>Children recognise 'how many' instantly when looking at a small group of objects, e.g., 'one nose', 'two eyes'.</li> </ul>	<ul style="list-style-type: none"> <li>There are lots of opportunities to explore objects in a range of different qualities, for e.g., 3 big tyres to roll, a basket of pine cones, 4 seats at the snack table.</li> <li>Adults model counting at every opportunity, e.g., counting the children to see how many there are, counting cups and lunch boxes at lunch time.</li> <li>Practitioners give children opportunities to solve problems, e.g., leave two pieces out of a puzzle.</li> </ul>	
<p>"I am active and curious"</p> <p><b>Rising Three end point</b></p> <p><b>Vocabulary: Number names to 5, touch count, all together, one more/less, a few, most, zero</b></p>	<ul style="list-style-type: none"> <li>Children enjoy joining in with number rhymes, songs and chants.</li> <li>Children begin to know the sequence of numbers and can recite numbers with increasing accuracy to ten (rote counting).</li> <li>Children begin to develop understanding of one-to-one correspondence.</li> <li>Children begin to recognise numerals which are personal to them, for e.g., '3' because they are '3 years old'.</li> </ul>	<ul style="list-style-type: none"> <li>There are lots of opportunities to explore number rhymes and songs and practitioners make this real using puppets and props, including the children themselves.</li> <li>Adults model counting actual objects and talk about the skills involved when doing so.</li> <li>Numerals are visible throughout the environment in meaningful contexts, for e.g., on the clock on the wall.</li> <li>Practitioners model writing numbers on a regular basis and for a purpose, for e.g., recording how many children there are today.</li> </ul>	
<p>"I am capable and confident"</p> <p><b>Pre-School end point</b></p> <p><b>Vocabulary: Number names to 10, Order, number patterns, number sequence, numeral, count forward, count back, share, divide, equal, whole, total</b></p>	<ul style="list-style-type: none"> <li>Children instantly recognise quantity without object counting (up to 3).</li> <li>Children can count objects to 10 with one-to-one correspondence.</li> <li>Children can confidently say 'how many' there are</li> <li>Children begin to show understanding of subitising and estimating.</li> <li>Children begin to write and make marks to represent numbers.</li> <li>To show 'finger numbers' up to 5.</li> <li>To solve real world mathematical problems with numbers up to 5.</li> </ul>	<ul style="list-style-type: none"> <li>A range of loose parts are available with supporting resources such as counting mats and sorting trays to experiment and support a deep awareness of number.</li> <li>Children are encouraged to be confident in their mathematical thinking and to be creative and 'think outside the box' with their approach.</li> <li>Practitioners model counting, adding up, subitising, and writing numerals at various points throughout the day.</li> <li>Practitioners use everyday opportunities to develop mathematical thinking through everyday problems e.g., register, snack time, a certain number of aprons at the water and painting areas.</li> </ul>	



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Maths: Numerical Patterns			
	Our Sequence of Learning	Our Unique Approach	Notes
<p>"I am a keen explorer"</p> <p><b>Two Year Old end point</b></p> <p><b>Vocabulary: fill, empty, same, different,</b></p>	<ul style="list-style-type: none"> <li>I can recognise that two things are the same shape.</li> <li>I can fit pieces into an inset puzzle.</li> <li>I enjoy filling and emptying containers and can recognise when these are full and empty.</li> </ul>	<ul style="list-style-type: none"> <li>Continuous provision allows children to explore shape, space, and measure in lots of different ways.</li> <li>Adults play alongside children and point out mathematical elements as this arises in the moment, for example when putting two wellies on, or when building a simple tower.</li> </ul>	
<p>"I am "active and curious"</p> <p><b>Rising Three end point</b></p> <p><b>Vocabulary: in, on,</b></p>	<ul style="list-style-type: none"> <li>I am beginning to select shapes for a creating purpose, when constructing, creating or mark making.</li> <li>I can name some simple shapes.</li> <li>I can talk about properties that are the same and different with simple objects.</li> <li>I explore weight through malleable and tactile play, on a small scale and a large scale.</li> <li>I can use simple positional language e.g., in, on.</li> </ul>	<ul style="list-style-type: none"> <li>There is an abundance of opportunities to explore mathematical concepts through the exciting and authentic learning environment, from tiny seeds to huge buckets full of sand.</li> <li>Children are supported to learn shape through their whole bodies as they learn both indoors and out.</li> <li>Teaching in the moment supports learning as and when it happens, for e.g., a lunch bag is labelled 'heavy' and running is labelled 'fast'.</li> <li>Practitioners model spatial words and prepositions allowing children opportunities to practice using them in their own play.</li> </ul>	
<p>"I am capable and confident"</p> <p><b>Pre-School end point</b></p> <p><b>Vocabulary: in front of, behind,</b></p>	<ul style="list-style-type: none"> <li>I can combine shapes to create other shapes, when constructing, drawing, or creating pictures, I am able to visualise and solve problems as I do.</li> <li>I understand how shapes can fit and balance together as I explore making enclosures, patterns, and new ideas.</li> <li>I understand position through words alone. E.g., 'The bag is under the table.'</li> <li>I can discuss routes and locations e.g., 'in front of' and 'behind.'</li> <li>I make comparisons between objects relating to size, length, weight and capacity.</li> </ul>	<ul style="list-style-type: none"> <li>Children are supported to follow their creative ideas and approaches with teachers who engage their mathematical brains through sustained shared thinking– is it long enough? What do you think? How can we extend it?</li> <li>Perseverance and determination in mathematical challenges are encouraged and modelled.</li> <li>Practitioners model the thinking of maths out loud, for e.g., 'we've got 3 square plates and 2 round ones'.</li> <li>Practitioners discuss position, routes and locations in real contexts and by using familiar stories.</li> <li>Practitioners provide experiences of size changes and talk with children about their everyday ways of comparing size, length, weight and capacity.</li> </ul>	