



# Leigh St Peter's CE Primary School

"Let Your Light Shine" Matthew 5:16

## Maths Curriculum

Term	Number of Weeks depends on the ability of the children
Autumn	<ul style="list-style-type: none"> <li>▪ <b>Cardinality and Counting</b> : Children to recite numbers in order using a range of number songs</li> <li>▪ <b>Comparisons</b>: Collections to sort—obvious differences in objects.</li> <li>▪ <b>Measure</b> (Recognising attributes) Water / Sand Play—filling containers.</li> <li>▪ <b>Shape and Space (Spatial awareness and viewpoints</b> / Spatial relationships / similarities between shapes)</li> <li>▪ Riding bike and trikes.</li> </ul>
Spring	<ul style="list-style-type: none"> <li>▪ <b>Cardinality and Counting</b> : Children to recite numbers in order using a range of number songs   Stable order principle - Rote counting</li> <li>▪ <b>Shape and Space (Spatial awareness and viewpoints</b> / Spatial relationships / similarities between shapes)   Riding bike and trikes, constructing, jigsaws, posting boxes.</li> <li>▪ <b>Cardinality and Counting</b> : Children to recite numbers   Stable order principle - Rote counting</li> <li>▪ <b>Cardinality and Counting</b>: Children to begin to count objects 'Give me two, three' etc   One to One counting principle—count by tagging each item as it is counted and assigning a name to each item. Lift and move</li> <li>▪ <b>Measure (Recognising attributes)</b> Play dough—length of snakes, weight of lumps.</li> <li>▪ <b>Shape and Space (Spatial awareness and viewpoints</b> / Spatial relationships / similarities between shapes)</li> <li>▪ Making pictures and patterns with shapes.</li> </ul>
Summer	<ul style="list-style-type: none"> <li>▪ <b>Cardinality and Counting</b> : Children to recite numbers in order using a range of number songs   Stable order principle - Rote counting</li> <li>▪ <b>Shape and Space (Spatial awareness and viewpoints</b> / Spatial relationships / similarities between shapes)   Riding bike and trikes, constructing, jigsaws, posting boxes,.</li> <li>▪ <b>Cardinality and Counting</b> : Children to recite numbers</li> <li>▪ <b>Cardinality and Counting</b>: Children to begin to count objects 'Give me two, three' etc   One to One counting principle—count by tagging each item as it is counted and assigning a name to each item. Lift and move</li> <li>▪ <b>Measure</b> (Recognising attributes) Discussing long, heavy. More. Adults to model vocabulary. (No comparisons need to be made at this point.)</li> <li>▪ <b>Shape and Space (Spatial awareness and viewpoints</b> / Spatial relationships / similarities between shapes)   Printing and making pictures and patterns with shapes.</li> </ul>

## Early Years Mathematics: Nursery (3 and 4 year olds)

*Educational Programme:* 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. (Working with the revised Early Years Foundation Stage: Principles into Practice, Julien Grenier)

Autumn	Spring	Summer
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Learning Priorities		
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Autumn	Spring	Summer
<p><b>Numerical Pattern and Number</b></p> <ul style="list-style-type: none"> <li>Begin to compare quantities ... <b>group, lots, more, same, less</b> <ul style="list-style-type: none"> <li>Sort, match and label groups</li> <li>Find the group with more / the same / less</li> </ul> </li> <li>Notice, identify and talk about patterns around them           <ul style="list-style-type: none"> <li>Clothing</li> <li>Autumn</li> </ul> </li> <li>Begin to copy and talk about a pattern – ABAB           <ul style="list-style-type: none"> <li>Patterns with objects / actions</li> <li>Give pattern a name</li> </ul> </li> <li>Begin to recite numbers to 5 in correct order</li> <li>Explore 1:1 correspondence           <ul style="list-style-type: none"> <li>Heuristic play free exploration</li> </ul> </li> <li>Begin to say one number for each item to 3           <ul style="list-style-type: none"> <li>Join in with number rhymes / songs with props &amp; actions</li> <li>Use some number names in play</li> </ul> </li> </ul> <p><b>Shape, Space &amp; Measure</b></p> <ul style="list-style-type: none"> <li>Begin to select shapes for appropriate tasks           <ul style="list-style-type: none"> <li>Show interest in shapes in the environment</li> <li>Manipulate and turn shapes</li> </ul> </li> <li>Begin to talk about shapes .... <b>round, pointy, spotty, stripy</b></li> <li>Make comparisons between objects using appropriate vocabulary           <ul style="list-style-type: none"> <li>Size ... <b>big / small / bigger / smaller</b></li> </ul> </li> <li>Understand positional language within daily routine ... <b>in / on / under</b></li> <li>Begin to understand the language of time within the daily routine ... <b>next, later, after</b></li> </ul>	<p><b>Numerical Pattern / Number</b></p> <ul style="list-style-type: none"> <li>Name and talk about patterns</li> <li>Continue and talk about a pattern – ABAB</li> <li>Recite numbers to 5</li> <li>Join in with number rhymes to 5 using props and fingers</li> <li>Use fingers to represent numbers with <b>increasing accuracy</b></li> <li>Use some numbers names in play with <b>some accuracy</b></li> <li>Sort and match objects accordingly e.g. size / shape</li> <li>Begin to compare quantities using ... <b>more than / fewer than</b></li> <li>Fast recognition of objects up to 1 and sometimes 2 – subitising</li> <li>Begin to count up to sets of 5 objects (1:1 correspondence)</li> <li>Begin to represent numbers with marks</li> </ul> <p><b>Shape, Space &amp; Measure</b></p> <ul style="list-style-type: none"> <li>Select shapes appropriately <b>in a range of contexts</b></li> <li>Begin to combine shapes to make new ones</li> <li>Talk about shapes</li> <li>Make comparisons between objects using appropriate vocabulary</li> <li>Understand positional language</li> <li>Begin to use some language of time within the daily routine</li> <li>Begin to describe a familiar route</li> <li>Begin to describe a sequence of events ... <b>first, next</b></li> </ul>	<p><b>Numerical Pattern / Number</b></p> <ul style="list-style-type: none"> <li>Extend and create ABAB patterns</li> <li>Recite numbers past 5</li> <li>Fast recognition of up to 3 objects - subitising</li> <li>Say one number for each item in order: 1,2,3,4,5.</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>Show 'finger numbers' up to 5.</li> <li>Link numerals and amounts up to 5</li> <li>Experiment with own symbols and marks as well as numerals.</li> <li>Solve real world mathematical problems with numbers up to 5</li> <li>Compare quantities using language: <b>'more than', 'fewer than'</b></li> </ul> <p><b>Shape, Space &amp; Measure</b></p> <ul style="list-style-type: none"> <li>Talk about and explore 2D and 3D shapes</li> <li>Understand position through words</li> <li>Describe a familiar route</li> <li>Make comparisons between objects relating to size, length, weight and capacity</li> <li>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.</li> <li>Combine shapes to make new ones</li> <li>Talk about and identifies the patterns around them.</li> <li>Extend and create ABAB patterns</li> <li>Begin to describe a sequence of events, real or fictional, using words such as <b>'first', 'then..'</b></li> </ul>

Term	Number of Weeks depends on the ability of the children
Autumn	<ul style="list-style-type: none"> <li>▪ <b>Cardinality and Counting</b> : Children to recite numbers in order using a range of number songs   Stable order principle - Rote counting (to 10 or above if appropriate)</li> <li>▪ <b>Shape and Space</b> (Spatial awareness and viewpoints / Spatial relationships / similarities between shapes)   Riding bike and trikes, constructing, jigsaws, posting boxes, making a complete circuit for a train or car.</li> <li>▪ <b>Cardinality and Counting:</b> Children to recite numbers to 5.</li> <li>▪ <b>Cardinality and Counting:</b> Children to begin to count objects 'Give me two, three' etc   One to One counting principle—count by tagging each item as it is counted and assigning a name to each item.</li> <li>▪ <b>Measure</b> (Recognising attributes) Discussing long, heavy. More. Adults to model vocabulary. (No comparisons need to be made at this point.)</li> <li>▪ <b>Shape and Space</b> (spatial awareness and viewpoints / spatial relationships / similarities between shapes)   Printing and making pictures and patterns with shapes.</li> </ul>
Spring	<ul style="list-style-type: none"> <li>▪ <b>Comparisons:</b> Collects to sort and compare—obvious differences in amounts.</li> <li>▪ <b>Cardinality and Counting:</b> To begin to recognise numbers 1-5 and practice these regularly (Introduce one number at a time)</li> <li>▪ <b>Shape and Space</b> (spatial awareness and viewpoints / spatial relationships / similarities between shapes)</li> <li>▪ <b>Language Position:</b> on, under, in Direction: Up, down, across   hunting for objects / Acting like robots / Small World Opportunities.</li> <li>▪ <b>Cardinality and Counting:</b> To continue to recognise numbers 1-5 and begin to match objects to quantity.</li> <li>▪ <b>Cardinality and Counting:</b> One to One counting principle—count by tagging each item as it is counted and assigning a name to each item.</li> <li>▪ <b>Cardinality and Counting:</b> Cardinal principle—that the last number is how many items you have counted. Up to 5.</li> <li>▪ <b>Measure (Recognising attributes)</b> Discussing long, heavy. More. Adults to model vocabulary. (No comparisons need to be made at this point.)</li> </ul>
Summer	<ul style="list-style-type: none"> <li>▪ <b>Cardinality and Counting:</b> To begin to recognise numbers 6-10 (One number at a time)</li> <li>▪ Revisit 1-5</li> <li>▪ <b>Cardinality and Counting:</b> One to One counting principle—count by tagging each item as it is counted and assigning a name to each item.</li> <li>▪ <b>Cardinality and Counting:</b> Cardinal principle—that the last number is how many items you have counted. Up to and beyond 5.</li> <li>▪ <b>Shape and Space:</b> (spatial awareness and viewpoints / spatial relationships / similarities between shapes)   Children to construct a bridge, den, towers using a variety of structured and unstructured materials, investigating which shapes work and which did not work.</li> <li>▪ <b>Measure</b> (Recognising attributes) Discussing long, heavy. More. Adults to model vocabulary. (No comparisons need to be made at this point.)   Sand and water play.</li> </ul>

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Getting to know you Baseline Assessments			Just Like Me!			It's me 1, 2, 3!			Light and Dark		
Number	Opportunities for settling in and introducing the areas of provision.  Key times of day, class routines. Exploring the continuous provision.  Where do things belong? Positional Language.			Match and Sort  Compare Amounts			Representing 1, 2 and 3  Comparing 1, 2 and 3  Composition of 1, 2 and 3			Representing numbers to 5.  One More and one Less.		
Measure, Shape and Spatial Thinking				Compare Size, Mass and Capacity  Exploring Pattern			Circles and Triangles  Positional Language			Shapes with 4 sides.  Time.		
Spring	Alive in 5!			Grow 6, 7, 8			Building 9 and 10			Consolidation		
Number	Introducing Zero.  Comparing numbers to 5.  Composition of 4 and 5			6, 7 and 8  Combining 2 amounts  Making pairs			Counting to 9 and 10  Comparing numbers to 10  Bonds to 10.					
Measure, Shape and Spatial Thinking				Compare mass (2)  Compare capacity (2)			Length and Height Time					
Summer	To 20 and Beyond!			First, Now, Then			Find my Pattern			On the Move		
Number	Building numbers Beyond 10  Counting patterns Beyond 10.			Adding More  Taking Away			Doubling  Sharing and Grouping  Even and Odd			Deepening Understanding  Patterns and Relationships		
Measure, Shape and Spatial Thinking				Spatial Reasoning (1)  Match, Rotate, Manipulate			Spatial Reasoning (2)  Compose and Decompose			Spatial Reasoning (3)  Visualise and Build		