



# Maths Long Term Plan Hadrian EYFS



EYFS Maths	
Statutory Framework EYFS	Key Links
<p>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.</p> <p>These three prime areas: communication and language, physical development, personal, social and emotional development, are strengthened and applied within Mathematics through careful planning.</p>	<p><a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/611422/Statutory_framework_for_the_early_years_foundation_stage.pdf">Statutory framework for the early years foundation stage (publishing.service.gov.uk)</a></p> <p><a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/611422/Development_Matters_-_Non-statutory_curriculum_guidance_for_the_early_years_foundation_stage.pdf">Development Matters - Non-statutory curriculum guidance for the early years foundation stage (publishing.service.gov.uk)</a></p>
<b>ELG</b>	<b>ELG objectives</b>

ELG: Number	<p>Children at the expected level of development will:</p> <ul style="list-style-type: none"> <li>• Have a deep understanding of number to 10, including the composition of each number; 14</li> <li>• Subitise (recognise quantities without counting) up to 5;</li> <li>• 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 double facts.</li> </ul>
ELG: Numerical Patterns	<p>Children at the expected level of development will:</p> <ul style="list-style-type: none"> <li>• Verbally count beyond 20, recognising the pattern of the counting system</li> <li>• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity</li> <li>• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</li> </ul>

2020 Development Matters statements that are prerequisite skills for mathematics within the national curriculum

\*The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for mathematics.

The most relevant statements for mathematics are taken from the following areas of learning:

- Communication and Language
- Mathematics

\*Sourced from Twinkl

NC Programme of Study Strand	ELG (statutory)	Development Matters (non-statutory)
Mathematical Vocabulary	Communication and Language Speaking	Communication and Language

	<ul style="list-style-type: none"> <li>Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</li> </ul>	<p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <li>Use a wider range of vocabulary.</li> <li>Understand 'why' questions, like: "why do you think the caterpillar is so fat?"</li> </ul> <p>Reception</p> <ul style="list-style-type: none"> <li>Learn new vocabulary.</li> <li>Use new vocabulary throughout the day.</li> </ul>
<b>Number and Place Value</b>		
<b>Number and Place Value - Counting</b>	<p><b>Mathematics</b> <b>Numerical Patterns</b></p> <ul style="list-style-type: none"> <li>Verbally count beyond 20, recognising the pattern of the counting system.</li> </ul>	<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <li>Recite numbers past 5.</li> <li>Say one number name 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> </ul> <p>Reception</p> <ul style="list-style-type: none"> <li>Recite numbers past 5.</li> <li>Say one number name 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> </ul>
<b>Number and Place Value - identifying, representing and estimating numbers</b>	<p><b>Mathematics</b> <b>Number</b></p> <ul style="list-style-type: none"> <li><b>Subitise (recognising quantities without counting) up to 5.</b></li> </ul>	<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <li>Develop fast recognition of up to 3</li> </ul>

		<p>objects, without having to count them individually ('subitising').</p> <ul style="list-style-type: none"> <li>• Show 'finger numbers' up to 5.</li> <li>• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>• Experiment with their own symbols and marks as well as numerals.</li> </ul> <p>Reception</p> <ul style="list-style-type: none"> <li>• Subitise.</li> <li>• Link the number symbol (numeral) with its cardinal number value</li> </ul>
<p><b>Number and Place Value - reading and writing numbers</b></p>		<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <li>• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>• Experiment with their own symbols and marks as well as numerals.</li> </ul> <p>Reception</p> <ul style="list-style-type: none"> <li>• Link the number symbol (numeral) with its cardinal number value.</li> </ul>
<p><b>Number and Place Value - compare and order numbers</b></p>	<p><b>Mathematics</b> <b>Numerical Patterns</b></p> <ul style="list-style-type: none"> <li>• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.</li> </ul>	<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <li>• Compare quantities using language: 'more than', 'fewer than'.</li> </ul> <p>Reception</p> <ul style="list-style-type: none"> <li>• Compare numbers.</li> </ul>

<b>Number and Place Value - understanding place value</b>	<b>Mathematics</b> <b>Number</b> <ul style="list-style-type: none"> <li>• Have a deep understanding of numbers to 10, including the composition of each number.</li> </ul>	<b>Mathematics</b>  Reception <ul style="list-style-type: none"> <li>• Understand the 'one more than/one less than' relationship between consecutive numbers.</li> <li>• Explore the composition of numbers to 10.</li> </ul>
<b>Number and Place Value - solve problems</b>		<b>Mathematics</b>  Three and Four-Year-Olds <ul style="list-style-type: none"> <li>• Solve real world mathematical problems with numbers up to 5.</li> </ul>
<b>Addition and Subtraction</b>		
<b>Addition and Subtraction - mental calculations</b>	<b>Mathematics</b> <b>Number</b> <ul style="list-style-type: none"> <li>• 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 double facts.</li> </ul>	<b>Mathematics</b>  Reception <ul style="list-style-type: none"> <li>• Automatically recall number bonds for numbers 0-5 and some to 10.</li> </ul>
<b>Addition and Subtraction - solve problems</b>	<b>Mathematics</b> <b>Numerical Patterns</b> <ul style="list-style-type: none"> <li>• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.</li> </ul>	
<b>Measurement</b>		
<b>Measurement- describe, measure, compare and solve (all strands)</b>		<b>Mathematics</b>  Three and Four-Year-Olds <ul style="list-style-type: none"> <li>• Make comparisons between objects relating to size, length, weight and</li> </ul>

		<p>capacity.</p> <p>Reception</p> <ul style="list-style-type: none"> <li>• Compare length, weight and capacity.</li> </ul>
Measurement - time		<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <li>• Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then...'</li> </ul>
<b>Properties of Shapes</b>		
Properties of Shapes - recognise 2D and 3D shapes and their properties		<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</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>• Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc.</li> <li>• Combine shapes to make new ones – an arch, a bigger triangle, etc.</li> </ul> <p>Reception</p> <ul style="list-style-type: none"> <li>• Select, rotate and manipulate shapes in order to develop spatial reasoning skills.</li> </ul>
Properties of Shapes - compare and classify shapes		<p><b>Mathematics</b></p> <p>Reception</p> <ul style="list-style-type: none"> <li>• Compose and decompose shapes so that</li> </ul>

		<p>children can recognise a shape can have other shapes within it, just as numbers can.</p>
<p><b>Position and Direction</b></p>		
<p><b>Position and Direction - position, direction and movement</b></p>		<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <li>• Understand position through words alone – for example, “The bag is under the table,” – with no pointing.</li> <li>• Describe a familiar route.</li> <li>• Discuss routes and locations, using words like ‘in front of’ and ‘behind’.</li> </ul> <p><b>Understanding the World</b></p> <p>Reception</p> <ul style="list-style-type: none"> <li>• Draw information from a simple map.</li> </ul>
<p><b>Position and Direction - Patterns</b></p>		<p><b>Mathematics</b></p> <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none"> <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.</li> <li>• Extend and create ABAB patterns – stick, leaf, stick, leaf.</li> </ul> <p>Notice and correct an error in a repeating pattern.</p> <p>Reception</p> <p>Continue, copy and create repeating patterns.</p>

## Statistics

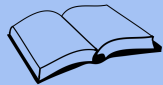
Statistics - record, present and interpret data

## Mathematics

Three and Four-Year-Olds

- Experiment with their own symbols and marks, as well as numerals.

## Key texts



The Great Pet Sale - Mick Inkpen  
Who Sank the Boat? - Pamela Allen  
Ten in the Bed - A Counting Book - David Ellwand  
Handa's Hen - Eileen Browne  
One Gorilla - A Counting Book - Anthony Browne  
Ten Little Fingers and Ten Little Toes - Mem Fox and Helen Oxenbury  
10 Little Rubber Ducks - Eric Carle  
Ten Terrible Dinosaurs - Paul Stickland  
Anno's Counting Book - Mitsumasa Anno  
Abigail - Catherine Rayner  
Pete the Cat and His Four Groovy Buttons - Eric Litwin  
One to Ten and Back Again - Nick Sharratt and Sue Heap  
Mouse Count - Ellen Stoll Walsh  
Kipper's Toybox - Mick Inkpen  
Dog's Colourful Day - Emma Dodd  
Ten Black Dots - Donald Crews  
Maisy Goes Camping - Lucy Cousins  
I Spy Numbers - Jean Marzollo and Walter Wick

[RECOMMENDATIONS - MathsThroughStories.org](https://www.mathsthroughstories.org) - for specific topics