

## Foundations in Maths

The Statutory Framework for the Early Years Foundation Stage is organised across seven areas of learning and development rather than specific subject areas.

The table below identifies the statements taken from the Statutory Framework for EYFS 2021 and *Development Matters* which are foundation skills for Maths within the National Curriculum.

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

- Communication and language
- Mathematics

Children have the opportunity to develop foundation skills in Maths as part of the daily continuous provision and focussed sessions in our EYFS provision.

<b>Cardinality and Counting</b> Understanding that the cardinality value of a number refers to the quality, or 'howmanyness' of things it represents.		
<b>Three and Four-Year-Olds</b>	Communication and language	<ul style="list-style-type: none"> <li>• Use a wider range of vocabulary.</li> <li>• Sing a large repertoire of songs.</li> <li>• Use longer sentences of four to six words.</li> </ul>
	Mathematics	<ul style="list-style-type: none"> <li>• Combine objects like stacking blocks and cups. Put objects inside others and take them out again</li> <li>• Take part in finger rhymes with numbers.</li> <li>• Compare amounts, saying 'lots', 'more' or 'same'</li> <li>• Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').</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>• Count in everyday contexts</li> <li>• Say one number for each item in order: 1,2,3,4,5</li> <li>• Recite numbers past 5.</li> <li>• Show 'finger numbers' up to 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>• Explore the composition of numbers to 10</li> <li>• Automatically recall number bonds for numbers 0–5 and some to 10.</li> </ul>
<b>Reception</b>	Communication and language	<ul style="list-style-type: none"> <li>• Learn new vocabulary.</li> <li>• Learn rhymes, poems and songs.</li> </ul>
	Mathematics	<ul style="list-style-type: none"> <li>• Count objects, actions and sounds</li> <li>• Link the number symbol (numeral) with its cardinal number value.</li> <li>• Subitise</li> </ul>

			<ul style="list-style-type: none"> <li>• Link the number symbol (numeral) with its cardinal number value.</li> <li>• Count beyond 10</li> </ul>
<b>ELG</b>	Communication and Language	Speaking & Listening	<ul style="list-style-type: none"> <li>• Listen attentively and respond to what they hear with relevant questions.</li> <li>• Make comments about what they have heard.</li> <li>• Offer explanation about why things might happen.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Have a deep understanding of number to 10, including the composition of each number.</li> <li>• Subitise up to 5 without counting.</li> <li>• Automatically recall number bonds to 5 and some number bonds to 10, including doubling facts.</li> </ul>

<b>Comparison</b>			
Understanding that comparing number involves knowing which numbers are worth more or less than each other			
<b>Three and Four-Year-Olds</b>	Communication and language		<ul style="list-style-type: none"> <li>• Understand 'why' questions.</li> <li>• Use longer sentences of four to six words.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Experiment with their 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: 'more than', 'fewer than'.</li> </ul>
<b>Reception</b>	Communication and language		<ul style="list-style-type: none"> <li>• Learn new vocabulary</li> <li>• Articulate their ideas and thoughts in well-formed sentences.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Compare numbers within 10</li> <li>• Understand the 'one more than/one less than' relationship between consecutive numbers.</li> </ul>
<b>ELG</b>	Communication and Language	Speaking & Listening	<ul style="list-style-type: none"> <li>• Make comments about what they have heard.</li> <li>• Offer explanation about why things might happen.</li> </ul>
	Mathematics	Creating Materials	<ul style="list-style-type: none"> <li>• Have a deep understanding of number to 10, including the composition of each number.</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 patterns within numbers up to 10, including evens and odds, double facts and how many quantities can be distributed evenly.</li> </ul>

<b>Pattern</b>			
Looking for and finding patterns helps children notice and understand mathematical relationships			
<b>Three and Four-Year-Olds</b>	Communication and language		<ul style="list-style-type: none"> <li>• Use a wider range of vocabulary.</li> <li>• Use longer sentences of four to six words.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Notice patterns and arrange things in patterns</li> <li>• Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper.</li> <li>• Use informal language like 'pointy', 'spotty', 'blobs', etc.</li> <li>• Extend and create ABAB patterns – stick, leaf, stick, leaf.</li> <li>• Notice and correct an error in a repeating pattern.</li> <li>• Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'</li> </ul>
<b>Reception</b>	Communication and language		<ul style="list-style-type: none"> <li>• Learn new vocabulary</li> <li>• Articulate their ideas and thoughts in well-formed sentences.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Continue, copy and create repeating patterns.</li> </ul>
<b>ELG</b>	Communication and Language	Speaking & Listening	<ul style="list-style-type: none"> <li>• Offer explanation about why things might happen.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Explore and represent patterns.</li> <li>• Explore patterns within numbers up to 10, including evens and odds, double facts and how many quantities can be distributed evenly.</li> </ul>

<b>Shape and Space</b>			
Understanding what happens when shapes move, or combine with other shapes, helps develop wider mathematical thinking			
<b>Three and Four-Year-Olds</b>	Communication and language		<ul style="list-style-type: none"> <li>• Use a wider range of vocabulary.</li> <li>• Use longer sentences of four to six words.</li> </ul>
	Mathematics		<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 building, a triangular prism for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc.</li> </ul>
<b>Reception</b>	Communication and language		<ul style="list-style-type: none"> <li>• Learn new vocabulary</li> <li>• Articulate their ideas and thoughts in well-formed sentences.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Select, rotate and manipulate shapes to develop spatial reasoning skills.</li> </ul>

			<ul style="list-style-type: none"> <li>• Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.</li> </ul>
<b>ELG</b>	Communication and Language	Speaking & Listening	<ul style="list-style-type: none"> <li>• Listen attentively and respond to what they hear with relevant questions.</li> <li>• Make comments about what they have heard.</li> <li>• Offer explanation about why things might happen.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Develop spatial reasoning skills</li> <li>• Recognise, create and describe patterns</li> </ul>

<b>Measure</b>			
Comparing different aspects such as length, weight and volume, as a preliminary to using units to compare later			
<b>Three and Four-Year-Olds</b>	Communication and language		<ul style="list-style-type: none"> <li>• Use a wider range of vocabulary.</li> <li>• Use longer sentences of four to six words.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Compare sizes, weights etc. using gesture and language - 'bigger/little/smaller', 'high/low', 'tall', 'heavy'.</li> <li>• Understand position through words alone – for example, "The bag is under the table," – with no pointing.</li> <li>• Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.</li> <li>• Make comparisons between objects relating to size, length, weight and capacity</li> </ul>
<b>Reception</b>	Communication and language		<ul style="list-style-type: none"> <li>• Learn new vocabulary</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Compare length, weight and capacity.</li> </ul>
<b>ELG</b>	Communication and Language	Speaking & Listening	<ul style="list-style-type: none"> <li>• Listen attentively and respond to what they hear with relevant questions.</li> <li>• Make comments about what they have heard.</li> <li>• Offer explanation about why things might happen.</li> </ul>
	Mathematics		<ul style="list-style-type: none"> <li>• Use everyday language to talk about size, weight, capacity, position, distance, time, and money to compare quantities and objects and to solve problems.</li> </ul>