

Maths in EYFS

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. These areas are Communication and Language, Personal, Social and Emotional Development (PSED), Physical Development, Mathematics, Literacy, Understanding the World and Expressive Art and Design. These seven areas of learning are further divided into Early Learning Goals (ELG's). ELG's are the targets that the children are expected to achieve at the end of their reception year.

The seven areas of learning are divided as follows:

Area of Learning	Early Learning Goals (ELG's)	
Communication and Language	Listening, Attention and Understanding	
	Speaking	
Personal, Social and Emotional Development (PSED)	Self-Regulation	
	Managing Self	
	Building Relationships	
Physical Development	Gross Motor Skills	
	Fine Motor Skills	
Mathematics	Number	
	Numerical Patterns	
Literacy	Reading	Comprehension
		Word Reading
	Writing	
Understanding the World	Past & Present	
	People, Culture and Communities	
	The Natural World	
Expressive Art and Design.	Creating with Materials	
	Being Imaginative and Expressive	

As a subject leader, it is important to note how the different skills taught across the seven areas of learning feed into national curriculum subjects.

These statements from the 2020 Development Matters are prerequisite skills for Maths 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 Maths.

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

- Communication and Language
- Mathematics
- Understanding the World

Maths Vocabulary			
Three and Four Year Olds	Communication and Language		<ul style="list-style-type: none"> • Use a wider range of vocabulary. • Understand 'why' questions, like: "why do you think the caterpillar is sofat?"
Reception	Communication and Language		<ul style="list-style-type: none"> • Learn new vocabulary. • Use new vocabulary throughout the day.
Early Learning Goal (ELG)	Communication and Language	Speaking	<ul style="list-style-type: none"> • Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.

Number and Place Value

Counting

Three and Four Year Olds	Mathematics		<ul style="list-style-type: none"> • Recite numbers past 5. • Say one number name for each item in order: 1, 2, 3, 4, 5. • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
Reception	Mathematics		<ul style="list-style-type: none"> • Count objects, actions and sounds. • Count beyond ten.
Early Learning Goal (ELG)	Mathematics	Numerical Patterns	<ul style="list-style-type: none"> • Verbally count beyond 20, recognising the pattern of the counting system.

Identifying, Representing and Estimating Numbers

Three and Four Year Olds	Mathematics		<ul style="list-style-type: none"> • Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). • 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. • Experiment with their own symbols and marks as well as numerals.
Reception	Mathematics		<ul style="list-style-type: none"> • Subitise. • Link the number symbol (numeral) with its cardinal number value.
Early Learning Goal (ELG)	Mathematics	Number	<ul style="list-style-type: none"> • Subitise (recognising quantities without counting) up to 5.

Reading and Writing Numbers

Three and Four Year Olds	Mathematics		<ul style="list-style-type: none"> • Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals.
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Reception	Mathematics		<ul style="list-style-type: none"> Link the number symbol (numeral) with its cardinal number value.
Compare and Order Numbers			
Three and Four Year Olds	Mathematics		<ul style="list-style-type: none"> Compare quantities using language: 'more than', 'fewer than'.
Reception	Mathematics		<ul style="list-style-type: none"> Compare numbers.
Early Learning Goal (ELG)	Mathematics	Numerical Patterns	<ul style="list-style-type: none"> Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
Understanding Place Value			
Reception	Mathematics		<ul style="list-style-type: none"> Understand the 'one more than/one less than' relationship between consecutive numbers. Explore the composition of numbers to 10.
Early Learning Goal (ELG)	Mathematics	Number	<ul style="list-style-type: none"> Have a deep understanding of numbers to 10, including the composition of each number.
Solve Problems			
Three and Four Year Olds	Mathematics		<ul style="list-style-type: none"> Solve real world mathematical problems with numbers up to 5.

Addition and Subtraction			
Mental Calculations			
Reception	Mathematics		<ul style="list-style-type: none"> Automatically recall number bonds for numbers 0-5 and some to 10.
Early Learning Goal (ELG)	Mathematics	Number	<ul style="list-style-type: none"> 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.
Solve Problems			
Early Learning Goal (ELG)	Mathematics	Numerical Patterns	<ul style="list-style-type: none"> Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.

Measurement			
Describe, Measure, Compare & Solve			
Three and Four Year Olds	Mathematics		<ul style="list-style-type: none"> Make comparisons between objects relating to size, length, weight and capacity.
Reception	Mathematics		<ul style="list-style-type: none"> Compare length, weight and capacity.
Telling the time			
Three and Four Year Olds	Mathematics		<ul style="list-style-type: none"> Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then...'

Properties of shapes		
Recognise 2D and 3D shapes and their properties		
Three and Four Year Olds	Mathematics	<ul style="list-style-type: none"> • 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'. • Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc. • Combine shapes to make new ones – an arch, a bigger triangle, etc.
Reception	Mathematics	<ul style="list-style-type: none"> • Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
Compare and Classify shapes		
Reception	Mathematics	<ul style="list-style-type: none"> • Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.

Position and Direction		
Position, Direction and Movement		
Three and Four Year Olds	Mathematics	<ul style="list-style-type: none"> • Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'.
Reception	Understanding the World	<ul style="list-style-type: none"> • Draw information from a simple map.
Patterns		
Three and Four Year Olds	Mathematics	<ul style="list-style-type: none"> • 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. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern.
Reception	Mathematics	<ul style="list-style-type: none"> • Continue, copy and create repeating patterns.

Statistics		
Record, Present and Interpret data		
Three and Four Year Olds	Mathematics	<ul style="list-style-type: none"> • Experiment with their own symbols and marks, as well as numerals.