



What does Maths look like in Early Years at St Michael's Nursery and Infant School?

The Early Years Foundation Stage Curriculum allows for flexible planning to respond to current events in the setting as well as the interests to the children. The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas.

The EYFS Educational Programme for **Mathematics** says:

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.

This document demonstrates which statements from the 2020 Development Matters 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:

- Mathematics

Mathematics	
Birth to Three	<ul style="list-style-type: none">• Combine objects like stacking blocks and cups.• Put objects inside others and take them out again.• Take part in finger rhymes with numbers.• React to changes of amount in a group of up to three items.• Compare amounts, saying 'lots', 'more' or 'same'.• Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.• Count in everyday contexts, sometimes skipping numbers -'1-2-3-5.'• Climb and squeezing selves into different types of spaces.• Build with a range of resources.• Complete inset puzzles.• Compare sizes, weights etc. using gesture and language -'bigger/little/smaller', 'high/low', 'tall', 'heavy'.• Notice patterns and arrange things in patterns.

Three and Four-
Year-Olds

- Fast recognition of up to 3 objects, without having
- to count them individually ('subitising').
- Recite numbers past 5.
- Say one number 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').
- 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.
- Solve real world mathematical problems with
- numbers up to 5.
- Compare quantities using language: 'more than',
- 'fewer than'.
- 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'.
- 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'.
- Make comparisons between objects relating to size,
- length, weight and capacity.
- 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.
- Talk about and identifies 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.
- Begin to describe a sequence of events, real or
- fictional, using words such as 'first', 'then...'

Reception	<ul style="list-style-type: none"> • Count objects, actions and sounds. Subitise. • Link the number symbol (numeral) with its cardinal number value. • Count beyond ten. • Compare numbers. • Understand the 'one more than/one less than' relationship between consecutive numbers. • Explore the composition of numbers to 10. • Automatically recall number bonds for numbers 0–10. • Select, rotate and manipulate shapes in order to develop spatial reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. • Continue, copy and create repeating patterns. • Compare length, weight and capacity.
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Early Learning Goal – Statutory ELG: Number

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- 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.

Statutory ELG: Numerical Patterns

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

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...'
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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.
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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.
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