Mathematics 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. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which early years outcomes are prerequisite skills for mathematics within the national curriculum. The table below outlines the most relevant early years outcomes from 30-50 months to ELG, brought together from different areas of the Early Years Foundation Stage to match the programme of study for mathematics.

The most relevant early years outcomes for mathematics are taken from the following areas of learning:

- Communication and Language
- Mathematics

ELG – Early learning goal – The end product the children are aiming for by the end of their reception year.

Mathematical Vocabulary			
30-50 Months	Communication and Language	Speaking	• To build up vocabulary that reflects the breadth of their experiences.
40-60 Months	Communication and Language	Speaking	• To extend vocabulary, especially by grouping and naming, • exploring the meaning and sounds of new words.
Number and Place Value			
Counting			
30-50 Months	Mathematics	Numbers	• To recite numbers in order to 10. • To realise not only objects, but anything can be counted including steps, claps or jumps.
40-60 Months	Mathematics	Numbers	• To count up to three or four objects by saying one number name for each item. • To count out up to six objects from a larger group. • To count actions or objects which cannot be moved. • To count objects to 10 and beginning to count beyond 10. • To count an irregular arrangement of up to ten objects. • To estimate how many objects they can see and check by counting them.
ELG	Mathematics	Numbers	• To count reliably with numbers from one to 20.
Identifying, Representing and Estimating Numbers			
30-50 Months	Mathematics	Numbers	• To use some number names and number language spontaneously. • To know that numbers identify how many objects are in a set. • To show an interest in representing numbers. • To begin to represent numbers using fingers, marks on paper or pictures. • To separate a group of three or four objects in different ways, beginning to recognise that the total is still the same. • To sometimes match numeral and quantity correctly.

40-60 Months	Mathematics	Numbers	• To select the correct numeral to represent 1 to 5, then 1 to 10 objects. • To say the number that is one more than a given number. • To find one more or one less from a group of up to five objects, then ten objects.
ELG	Mathematics	Numbers	• To say which number is one more or one less than a given number from one to 20.
Reading and Writing Numbers			
30-50 Months	Mathematics	Numbers	• To show an interest in numerals in the environment. • To use some number names accurately in play.
40-60 Months	Mathematics	Numbers	• To recognise some numerals of personal significance. • To recognise numerals 1 to 5.
Compare and Order Numbers			
30-50 Months	Mathematics	Numbers	• To compare two groups of objects, saying when they have the same number.
40-60 Months	Mathematics	Numbers	• To use the language of 'more' and 'fewer' to compare two sets of objects.
ELG	Mathematics	Numbers	• To place numbers one to 20 in order.
Understanding Place Value			
30-50 Months	Mathematics	Numbers	• To show curiosity about numbers by offering comments or asking questions.
Solve Problems			
30-50 Months	Mathematics	Numbers	• To show an interest in number problems.
40-60 Months	Mathematics	Numbers	• To begin to identify own mathematical problems based on own interests and fascinations.
Addition and Subtraction			
Mental Calculations			
40-60 Months	Mathematics	Numbers	• To find the total of items in two groups by counting all of them. • To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion.
ELG	Mathematics	Numbers	• To add and subtract two single-digit numbers and count on back to find the answer using quantities and objects.
Solve Problems			
ELG	Mathematics	Numbers	• To solve problems, including doubling, halving and sharing.
Measurement			
Describe, Measure, Compare and Solve (all strands)			
40-60 Months	Mathematics	Shape, Space and Measure	• To order two or three items by length or height. • To order two items by weight or capacity.
ELG	Mathematics	Shape, Space and Measure	• To use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and solve problems.

Telling the Time			
40-60 Months	Mathematics	Shape, Space and Measure	• To use everyday language related to time. • To order and sequence familiar events. • To measure short periods of time in simple ways.
Money			
40-60 Months	Mathematics	Shape, Space and Measure	• To begin to use everyday language related to money.
Properties of Shapes			
Recognise 2D and 3D Shapes and their Properties			
30-50 Months	Mathematics	Shape, Space and Measure	• To show an interest in shape and space by playing with shapes or making arrangements with objects. • To show interest in shape by sustained construction activity or by talking about shapes or arrangements. • To show interest in shapes in the environment. • To use shapes appropriately for tasks. • To begin to talk about shapes in everyday objects, e.g. 'round' and 'tall'.
40-60 Months	Mathematics	Shape, Space and Measure	• To begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. • To select particular named shapes.
ELG	Mathematics	Shape, Space and Measure	• To explore characteristics of everyday objects and shapes and use mathematical language to describe them.
Compare and Classify Shapes			
30-50 Months	Mathematics	Shape, Space and Measure	• To show awareness of similarities of shapes in the environment.
Position and Direction			
Position, Direction and Movement			
30-50 Months	Mathematics	Shape, Space and Measure	• To use positional language.
40-60 Months	Mathematics	Shape, Space and Measure	• To describe their relative position, such as 'behind' or 'next to'.
Patterns			
40-60 Months	Mathematics	Shape, Space and Measure	• To use familiar objects and common shapes to create and recreate patterns and build models.
ELG	Mathematics	Shape, Space and Measure	• To recognise, create and describe patterns.
Statistics			
Record, Present and Interpret Data			
40-60 Months	Mathematics	Numbers	• To record, using marks that they can interpret and explain.