

Mathematics within the Early Years Foundation Stage at Bradshaw Hall Primary School

Overview

Mathematics is a specific area of learning and development within the Early Years Foundation Stage and includes Number and Shape, Space and Measure. Children develop essential skills and knowledge as they progress towards the Early Learning Goals. Children use a wide range of practical resources inside and outside and are encouraged to develop their problem solving skills in a variety of ways.

Number

Nursery

Within nursery our children will learn:

- To use some number names and number language spontaneously.
- To use some number names accurately in play.
- To recite numbers in order to 10.
- To know that numbers identify how many objects are in a set.
- To begin to represent numbers using fingers, marks on paper or pictures.
- To sometimes match numeral and quantity correctly.
- To show curiosity about numbers by offering comments or asking questions.
- To compare two groups of objects, saying when they have the same number.
- To show an interest in number problems.
- To separate a group of three or four objects in different ways, beginning to recognise that the total is still the same.
- To show an interest in numerals in the environment.
- To show an interest in representing numbers.
- To realise not only objects, but anything can be counted, including steps, claps or jumps.

Reception

Within Reception our children will learn:

- To recognise some numerals of personal significance.
- To recognise numerals 1 to 5.
- To count up to three or four objects by saying one number name for each item.
- To count actions or objects which cannot be moved.
- To count objects to 10, and beginning to count beyond 10.
- To count out up to six objects from a larger group.
- To select the correct numeral to represent 1 to 5, then 1 to 10 objects.
- To count an irregular arrangement of up to ten objects.
- To estimate how many objects they can see and check by counting them.
- Uses the language of 'more' and 'fewer' to compare two sets of objects.
- To find the total number of items in two groups by counting all of them.

- 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.
- To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion.
- To record, using marks that they can interpret and explain.
- To begin to identify own mathematical problems based on own interests and fascinations.

Early Learning Goal (the expected level of development by the end of Reception)

- **To count reliably with numbers from one to 20.**
- **To place numbers in order and say which number is one more or one less than a given number.**
- **To use quantities and objects to add and subtract two single-digit numbers and to count on or back to find the answer.**
- **To solve a range of problems, including doubling, halving and sharing.**

Shape, Space and Measure

Nursery

Within nursery our children will learn:

- To show an interest in shape and space by playing with shapes or making arrangements with objects.
- To show awareness of similarities of shapes in the environment.
- To use positional language.
- 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 the shapes of everyday objects, e.g. 'round' and 'tall'.

Reception

Within nursery our children will learn:

- To begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.
- To select a particular named shape.
- To describe their relative position such as 'behind' or 'next to'.
- To order two or three items by length or height.
- To order two items by weight or capacity.
- To use familiar objects and common shapes to create and recreate patterns and build models.
- To use everyday language related to time.
- To begin to use everyday language related to money.
- To order and sequences familiar events.

- To measure short periods of time in simple ways.

Early Learning Goal (the expected level of development by the end of Reception)

- **To use everyday language to talk about size, weight, capacity, position, distance, time and money.**
- **To compare quantities and objects and to solve problems.**
- **To recognise, create and describe patterns.**
- **To explore the characteristics of everyday objects and shapes and use mathematical language to describe them.**

By the end of Reception children are expected to reach the Early Learning Goals. At Bradshaw Hall we provide a wealth of opportunities to support and enable each child to reach their full potential. The development statements suggest a typical range of development, however, we understand that children develop at their own rates and in their own unique ways.