
Maths in the Early Years



Parent Workshop
10.10.2024

What happens early, matters for a lifetime

What parents do is more important than who parents are.



- [Research](#) tells us that what happens at home makes the biggest difference to your child's early learning and development.
- Playing together, singing, enjoying books, visiting the library, painting, drawing and finding out through play about letters, numbers and shapes are important activities to do at home. These activities are learning opportunities.
- These learning activities will make a difference to your child's learning right up to secondary school.

Birth to three: Mathematics

- I like to play with stacking blocks and cups. I put objects inside others and take them out again.
- I enjoy taking part in finger rhymes with numbers.
- I react to changes of amount in a group of up to three items – if you build a tower with three blocks and take one away, I'll notice.
- I can compare amounts, saying 'lots', 'more' or 'same'.
- I am starting to show an interest in counting by making sounds, pointing and saying some numbers in order.

- I use words and gestures to compare size and weight: 'bigger/little/smaller', 'high/low', 'tall', 'heavy'.
- I notice patterns and arrange things in patterns.



Seven areas of learning and development in the EYFS

The **three prime areas** are crucial for igniting children's curiosity and enthusiasm for learning.



Communication and Language



Personal, Social and Emotional Development



Physical Development

The three prime areas are strengthened and applied through the **four specific areas**.



Literacy



Mathematics



Understanding the World



Expressive Arts and Design

Nursery:

3 & 4-year-olds: Mathematics

- I like to experiment with making my own marks and symbols as well as numerals.
- I can use mathematical words to compare amounts 'more than', 'fewer than'.
- I like to explore 2D (flat) and 3D (solid) shapes. I can talk about shapes using everyday words like 'pointy'. I can use mathematical words like: 'sides', 'corners', 'straight', 'flat', 'round'.
- I can understand position through words alone, e.g. "The bag is under the table." – with no pointing.
- I can describe a familiar route.
- I can talk about routes and locations, using words like 'in front of' and 'behind'.



- I can make and extend ABAB patterns – stick, leaf, stick, leaf.
- I can spot an error in a repeating pattern and correct it.
- I am learning to use words such as 'first', 'then' 'after' to describe a pattern of events.

Year N: Number based learning

Counting forwards and backwards
to 5

Subitise up to 5

One more up to 5

Match objects to numerals

Recognise numerals up to 5

Reception:

4 & 5-year olds: Mathematics

- I can count objects, actions and sounds.
- I can quickly recognise a group of up to five objects without counting. This is called 'subitising'.
- I can match the correct numeral (number symbol) to the right amount, e.g. I can play 'snap' where some cards have numerals, and some have dot arrangements.
- I can count beyond ten.
- I can compare numbers of items.
- I understand the 'one more than/one less than' relationship between consecutive numbers.



4 & 5-year olds: Mathematics

- I am learning about how numbers are made up of other numbers up to 10, e.g. 3 and 3 makes 6. This is called composition of number.
- I know and can say number bonds for numbers 0-5 and some to 10.
- I can select and rotate shapes, this helps me to learn spatial reasoning skills.
- I am learning about how shapes can be combined to make new shapes, e.g. two triangles can be put together to make a square. This helps me to recognise a shape can have other shapes within it, just like numbers can.
- I can continue, copy and create repeating patterns.
- I can compare length, weight and capacity, e.g. "This is heavier than that."



Early Learning

Goal: Number

(end of reception)

Children can **count reliably from 1-20**, **place them in order** and say what is one more and what is one less than a given number.

Using quantities and objects, they can **add and subtract single digits** and count on and back to find the answer.

They solve problems such as **doubling, halving and sharing**.

Early Learning Goal: Numerical Patterns (end of reception)

- 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.

Year 1: Number based learning

Counting forwards and backwards to 50

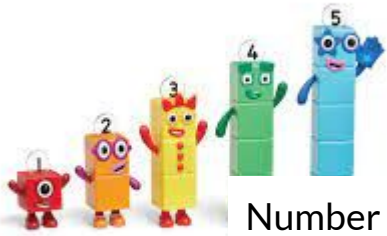
Times tables (2,5 & 10)

One more, one less & 10 more, 10 less

Addition & subtraction

Sharing and grouping

Activities for home - online



Number blocks (youtube)



Maths Games



Little Digits App



Fish School App



Problem Solving Games



A fun way to practice
sums and counting

Aliens & Numbers App

— Activities for home - outside the home



- When we're at the park, use words like 'up', 'under', and 'between' to talk about what we see.

Activities for home - at home

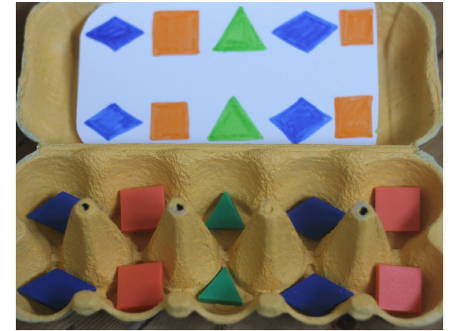
Mathematics

- Give me stacking cups and blocks (or cardboard boxes!) Use words like 'in', 'on', 'more', 'lots'.
- Count with me as you put my clothes on, e.g. "One sock, two socks."
- [Sing finger rhymes with numbers e.g. Two Little Dicky Birds](#)
- Let me explore 'full' and 'empty' with containers in the bath.

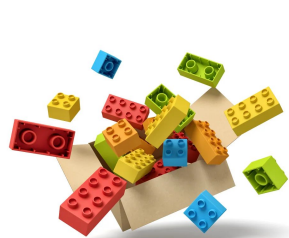


- [Point out the number of things rather than just the names](#), e.g. "We have **two** apples!"
 - Give me lots of opportunities to count for a real reason and always emphasise the last number – "There are **3** cookies."
 - Cut out a large shape from a cereal box (circle, triangle), then cut that shape into 2-4 smaller pieces to make a simple puzzle.
-

- Name small groups of things, this helps me to 'subitise' (instantly seeing how many without counting) e.g. "There are 3 slices of pizza left."
- Ask me to count out a number of things from a group, e.g. "Could you get me 6 eggs?"
- Make number snap or bingo with numerals and pictures. Match the numerals with the right amount.
- Make patterns with objects, e.g. buttons or shells. Such as 'big, small, big...' Make a mistake and talk with me about how to fix it.



Can you think of an activity you could do with some of the objects on the table?



Children can count reliably from 1-5 (YN) or 1-20 (YR), place them in order and say what is one more and what is one less than a given number.

Using quantities and objects, they can add and subtract single digits and count on and back to find the answer.

They solve problems such as doubling, halving and sharing.

Any questions?