Maths Mastery

in Nursery

The maths curriculum in EYFS has changed...

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What is teaching for mastery?

Teaching for mastery allows children to gain a deep understanding and acquire a secure and long term understanding of Maths.

We break down Maths objectives into the smallest steps, so that every pupil is secure in every new concept before moving on. We focus upon teaching for fluency, reasoning and problem solving.

End of Nursery Maths Goals

By the end of Nursery, we would expect the children to be able to:

- Have a deep understanding of number 1 to 5.
- Talk about and explore 2D and 3D shapes using both informal and mathematical language.
- Make comparisons between objects relating to size, length, height, weight and capacity.



How do we teach for mastery in Nursery?

We want to develop children's number sense so that they understand the number rather than just recognising the numeral. Children need to understand that numbers can be represented in many ways, not just as a written numeral. We use many different objects and pictures to show that numbers can be represented in lots of ways.



Counting

When counting, children need to understand:

- That we need to say one number for each object counted (touch counting).
- The final number we say is how many altogether. Some children continue to count after they have reached the final object as they don't connect the numbers they are saying to the objects in front of them.
- That we can count objects in any order and the total stays the same.



Problem Solving

Problem solving in Maths allows children to use their maths skills in lots of contexts and in situations that are new to them.

It allows them to seek solutions, spot patterns and think about the best way to do things rather than blindly following maths procedures.

In Nursery, problem solving might include:

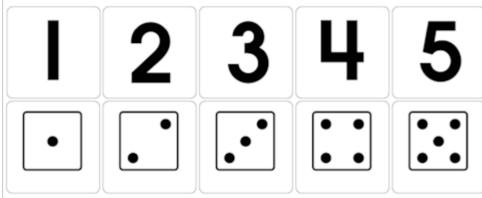
- Spotting, following and creating patterns.
- Sharing objects between different groups
- Sorting objects in a range of ways i.e. colour, size, shape, number etc.



Recognising Amounts

In Nursery we practise recognising amounts up to 3. Recognising small amounts without the need to count them is an important skill. To begin with, the children will use concrete objects such as dice, playing cards, dominoes etc. By the end of the year children should be able to see groups of dots in different arrangements, which helps them to mentally 'see' how many objects are there without needing to count.

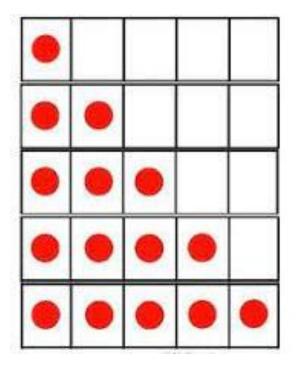
This is a very important skill when children begin to add and subtract. Using dice is a good way to practise this skill before moving onto objects in different arrangements.



Recognising Amounts

When children first start to use numbers, they often do not understand that if we move objects into another arrangement the total stays the same.

We practise this with many different types of objects but a useful tool is using a fives frame.



How can I help at home?

- Sing counting songs
- Look for numbers in everyday life i.e. clocks, number plates, doors, telephones
- Go on shape hunts and discuss the number of sides
- Read maths focus stories such as The Very Hungry Caterpillar, One Ted Falls Out of Bed and The Perfect Square.
- Watch Numberblocks and Numberjacks
- Make cakes to practise using weighing scales
- Play with a range of pots in the bath to investigate capacity
- Give your child a ribbon and ask them to find something longer than and shorter than
- Introduce simple mathematical language such as "more than/less than"
- Discuss patterns that you see using language such as "spotty", "stripey", "curvy", "zig-zag" etc.



Numberblocks

In Nursery we love the Numberblocks!

The series has been carefully crafted with the help of maths specialists to ensure that it delivers the essential numeracy skills that build good number sense and a solid foundation for a lifetime of maths success.

You can find the Number blocks episodes on BBC iPlayer.

