

## Mastering Number at Home

**What is Mastering Number and why is your involvement so important?**

Research proves that high quality teaching in school is key to raising attainment. However, a parent/carer's role is also really important!

The help that parents give their children at home has a very significant impact on their learning.

*Development Matters (2023)*

**The Mastering Number Programme is a new national programme based on research into what is important in early maths education.**

The numbers children use in this programme may be smaller than they can do at home but the approach purposefully focuses on smaller numbers so that the children can develop a deep understanding of number to develop that good number sense. This foundational knowledge ensures they aren't just memorising steps but truly grasping the concepts behind them.

Children will be learning gradually to count out larger sets of objects and join in with the counting numbers. To have a really good foundation to build on, the smaller numbers are so important.

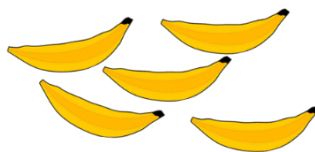
The Mastering Number Programme will help children develop good *number sense* from Reception to Year 2. Some of the things they are learning include:

Reception



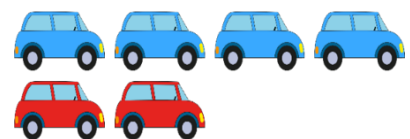
Counting

Reception, Year 1, Year 2



Recognising small numbers of objects without having to count them

Reception, Year 1, Year 2



Know different ways to 'make' (compose) a number

How does knowing how numbers are 'made' help children?

**Children who develop good number skills early on are much more confident and capable in maths later on.**

I know that 8 is made of 5 and 3 so I will also know...

$$5 + 3 = 8$$

$$50 + 30 = 80$$

$$500 + 300 = 800$$

$$8 - 3 = 5$$

$$80 - 30 = 50$$

$$0.5 + 0.3 = 0.8$$

$$0.8 - 0.3 = 0.5$$



## What does this look like at home?

This is a five week programme for you to complete with your child. The resources you need for each week can be downloaded using the links below. Each Monday your child will bring home a diary for you to complete as you play the games at home. A comment is not needed for each day, but do share any success stories and anything that you are noticing about your child's learning. These activities and games are a fun and easy way to support children in their maths journey. We understand that everyone is busy, so these activities are meant to be short, lasting a maximum of 10 minutes.

They can be done during the week or at the weekend and with any adult. However, if you have extra time, then extra activity ideas are also provided. Where possible, try to stick to the order of the homework exercises.

Some weeks you will see the term 'stem sentences' used. A stem sentence is a structured sentence that helps children to communicate their mathematical ideas with clarity and precision. They are used in maths lessons throughout school and support the children with their reasoning skills. Therefore, do encourage your child to use these stem sentences throughout the activity.

We hope that you find these activities useful in supporting your child's learning.

## Why do we purposefully use smaller numbers?

**Research by the Education Endowment Foundation (EEF)** shows that strong number sense is a critical component for future success in mathematics. Children who develop a deep understanding of number concepts, including place value, addition, subtraction, multiplication, and division, are better equipped to tackle more advanced topics in mathematics (e.g., fractions, algebra, geometry) later on.

Evidence from **The Royal Society (2014)** shows that early mastery of number operations correlates with success in later mathematical concepts and overall academic achievement. By the end of Key Stage 2, students who have mastered key number skills are more likely to transition smoothly into secondary school mathematics, where abstract concepts such as algebra and geometry require strong foundational skills.