

Everything you need to know about... **Maths Mastery**



You may or may not have heard about mathematics mastery – either through your child’s school or on the news. We’ve pulled together this fact sheet to help you understand the basics...

Why the mastery approach?

Primary schools across England have begun to adopt a new way of teaching maths. This approach involves teaching for mastery, and is inspired by teaching practices in South Asia (high performing jurisdictions like Singapore, Hong Kong and Shanghai repeatedly perform well in international mathematics tests).

The Government has high aspirations for primary school children in England, so they are investing in this new approach in mathematics. Funding is being allocated to schools to support teacher training and help schools purchase new resources, so that children can really benefit from this method of teaching.

How does mastery benefit children?

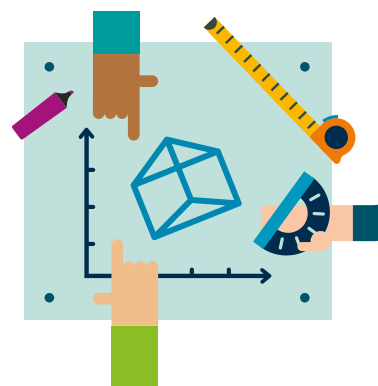
Teaching for mastery in maths rejects the idea that a large proportion of people ‘just can’t do maths’. It looks to build confidence and to show children that with hard work they can succeed. This new approach aims to raise standards – meaning that more

children should achieve the expected standard in mathematics. You should notice a difference – not only in your child’s achievement, but also in their attitude towards mathematics.

What is mastery?

Teaching for mastery is based on a belief that all children can achieve in maths. In practice, this means children are no longer taught different concepts based on whether they are seen to be ‘less able’ or ‘more able’. Instead, the whole class is taught together but extra support is given to children who find the topic difficult, and challenging questions are given to children who are flying.

Concepts are built in small, logical steps and are explored through clear mathematical models and images. The focus is on depth – not acceleration – so that all children have a chance to embed learning. Teaching is supported by high-quality resources which present the flow of lessons coherently and provide opportunities for plenty of practice. Children use objects and pictures to physically represent mathematical concepts alongside numbers and symbols – this helps them to visualise ideas.



Will children who find maths difficult be left behind?

This method of teaching aims to ensure all children have a secure and deep understanding of maths, by building up maths concepts in small and logical steps. This makes maths accessible to the majority of children. Teachers will use a range of teaching techniques to make sure children do not fall behind. You may hear teachers talking about same day intervention. This involves intervening quickly to tackle any key misconceptions so that children keep up and don't have to catch-up!

How will children who are already doing well in maths be challenged?

The national curriculum in England places emphasis on depth and breadth, not speed and acceleration. It's really important that learning is not superficial. For example, a child may understand how to use a particular method, but to demonstrate they have a deep understanding they need to explain why it works and why it's efficient. Teachers will challenge children who grasp concepts quickly by providing sophisticated problems, rather than by accelerating them through new content from other year groups.

'Challenge' can come in many forms and it's important not to confuse 'challenging' maths, with maths from a higher year group.

How can I help at home?

You can continue to help your child by talking about maths positively at home. Children are influenced by those around them - if they hear people say they can't do maths, or they hate maths, they may develop a more negative attitude towards the subject. This can negatively affect their performance in the subject and their development of important life skills. It's important to help your child develop a growth mindset in mathematics too. For more information on how to do this, take a look at our supporting fact sheet, *Everything you need to know about growth mindset in maths*.

Support children with any activities they bring home. Take care to look at the methods and models being used at school. It's important to try not to confuse children by talking about the methods and approaches you learned yourself, or by encouraging them to use 'shortcuts' that might stop them from achieving a deeper understanding of the maths. If you are unsure about any concepts, or you want to learn more about the methods, models and images used to teach maths, ask a teacher to explain how you can help at home.



- **Make the most of shopping trips and other outings** – talk about spending money and calculating change. Does your child understand the offers they see on signs or adverts in shops?
- **Maths is a broad subject, and encompasses topics like measure and shape!** Can your child recognise shapes in their everyday surroundings? Can they tell the time, or use weighing scales?
- **Think about how you can involve your child in everyday problem solving.** You may be planning a party, or cooking dinner. Many tasks involve sharing, or using fractions!