



## Mastery in Mathematics at Brimscombe C of E Primary School

**At Brimscombe we have adopted our own interpretation of the 'Mastery' approach to teaching and learning in Mathematics.**

**Our beliefs:** We believe that ability within Mathematics is not fixed. We are developing the mindsets of children and adults to develop a Growth Mindset and an 'I can' attitude to Mathematics. We believe that through quality first teaching and intelligent practice, children learning together and a growing independence that **all** children have the opportunity to broaden their understanding of mathematical concepts.

**Our definition of Mastery:** At Brimscombe we have a core set of principles and beliefs for achieving mastery in mathematics. This includes a belief that all pupils are capable of understanding and doing mathematics but will access it in different ways. Pupils are encouraged to 'rise to the challenge' and understand that 'mistakes are learning points'. With good teaching, appropriate resources, effort and an 'I can' attitude all children can achieve and enjoy mathematics.

Mastery is not just being able to memorise key facts or how to do written calculations. Nor is it only about how to answer test questions accurately and quickly. Mastery is much more; it involves knowing how and why calculations and procedures work. It means being able to use knowledge appropriately and to apply it to everyday situations that may well be unfamiliar.

For all maths concepts teachers need to ensure that children are **"challenged through rich problems."** After developing fluency, children need to show that they can apply their knowledge in mathematics and then move on even further to prove they have mastered the concept. This may well be within key life situations.

**Our Mathematics in Mastery curriculum:** In Years 1-6 we have developed our curriculum to allow teachers to develop the **skills** of mathematics, **apply** these skills to a variety of different situations and then **deepen** this understanding. We like to call it **SKILL IT/APPLY IT/DEEPEN IT**. It is designed to allow children to individually work through an objective whilst still having access to trickier problems. In Early Years we given the children the opportunity to 'Explore Maths' and develop their understanding of Mathematical concepts through play.

**Mastery teaching and learning:** In every Mathematics lesson you will see the following:

- 'Quality first' teaching; tailored to meet the needs of the learners in each class, and immediate intervention to address gaps in learning where necessary,
- Resilient learners with Growth Mindsets and a 'I can' attitude to Mathematics, whatever their previous level of attainment,
- All staff using high-quality questioning to explore children's understanding and develop it further,
- All staff making use of misconceptions to further understanding of key concepts,
- All staff using a range of methods to explore key Mathematical concepts which appeal to pupils' different styles of learning, employing concrete/pictorial/abstract representations of Mathematical concepts,
- Learners being given the opportunity to access all mathematical objectives individually,
- Pupils learning together and supporting each other,
- Development of fluency, reasoning and solving,
- Pupils being independent

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