



Teaching for Mastery Mathematics at Starbeck Primary Academy

Mastery of mathematics is something we want all pupils to acquire and continue to acquire throughout their school lives, and beyond. The phrase 'teaching for mastery' describes the range of elements of classroom practice and school organisation that combine to give pupils the best chance at mastering mathematics.

Mastering mathematics means acquiring a deep and secure understanding of the subject. A mathematical concept or skill has been mastered when a pupil can represent it in multiple ways, has the mathematical language to communicate related ideas, and can independently apply the concept to new problems.

Mastery is a journey and a long-term goal, achieved through exploration, clarification, practice and application over time.

At Starbeck school we are teaching for mastery by:-

*Pupils are taught in single year groups through whole-class interactive teaching, where the focus is on all pupils working on the same lesson content at the same time. This ensures that all children can master concepts before moving onto the next part of the curriculum sequence, allowing no pupil to be left behind.

*We believe all pupils can achieve in maths and understand that a positive teacher mindset and strong subject knowledge are key to student success.

* By making high expectations clear and emphasising the value of mathematics education, pupils are encouraged to build confidence and resilience.

*All pupils are encouraged by the belief that they can succeed in maths.

*Support is given during lessons by use of high quality resources and methods of scaffolding/modelling to enable all children to grasp mathematical concepts

*If a pupil fails to grasp a concept or procedure, this is identified during lessons and early intervention such as additional support or recap of concepts is used to support such pupils.

* A further challenge is used in lessons to challenge pupils understanding and enable them to dive deeper into the concepts taught within the lesson.

*Pupils working at Greater depth will be encouraged to explain their mathematical thinking further and encouraged to dive even deeper by further investigations or questions.

*Lesson design identifies the new mathematics that is to be taught, through small steps taught separately in lessons. In a typical lesson the teacher leads back and forth interaction, including questioning, short tasks, explanation, demonstration, and discussion.

*Pupils are presented with multiple representations through a concrete, pictorial, abstract (C-P-A) approach to ensure a deep and sustainable understanding of maths. Pupils are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols.

*Key facts such as multiplication tables and addition facts are learnt through our whole school KIRF approach. Children are regularly assessed in their learning of these key facts and are given opportunities within class to develop fluency and instant recall.