



Maths at Medlock Primary School

At Medlock Primary we have the ambition for all our pupils to achieve the highest standard. Our curriculum has been designed to ensure this vision becomes a reality by inspiring all our pupils to become confident, independent and responsible lifelong learners. To do this we have ensured that the backgrounds of our community (which have roots across the globe) are reflected in the curriculum content. The explicit sequencing and teaching of vocabulary and subject specific language is used to provide our children with the highest quality language for learning. Opportunities for reading widely and deeply are central to this as is the development of children's 'voice' (both verbal and written), to enable them to communicate and question confidently and effectively.

Each subject in our curriculum has been designed to always build and link to prior learning and make connections beyond the individual subjects to maximise its impact and ensure the children learn more and remember more.

Why we teach Maths - Our Intent

At Medlock, we use the Primary Advantage (PA) maths approach. This is a mastery approach built upon the programmes of study for the National Curriculum for Mathematics at Key Stage 1 and 2. In Early Years the children are given the foundation knowledge they need so as to be ready for the rigours of the PA approach.

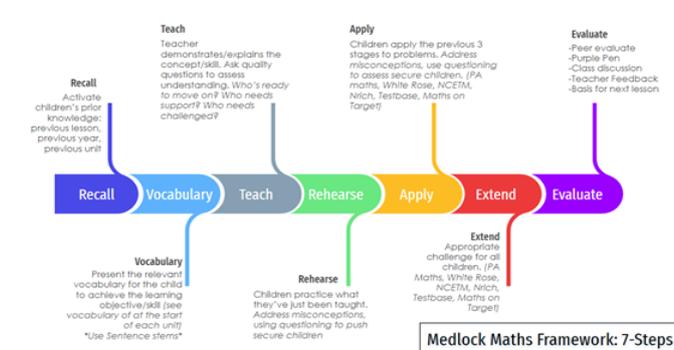
The curriculum is planned in a sequenced way to build on knowledge, applied knowledge and understanding from EYFS to Year 6. Mathematical concepts are approached in small steps to ensure the broad and deep mastery of the areas of study.

Curriculum Implementation in Maths

Medlock Primary School follows the National Curriculum. All learning in Maths is designed to build on what has come before. We follow a CPA and Maths Mastery based approach to teaching in conjunction with a knowledge engaged curriculum. The structure of the learning supports our children gain the knowledge they need. It also develops the subject specific and transferable skills needed in order for them to make sense of the subject.

The curriculum is built on questions, and places an emphasis on explicit teaching of vocabulary. Each lesson, is structured using our school's 'Inspiring Teaching Principles' which are evidence based in their approach.

All Maths learning is planned and delivered using the Medlock Maths 7steps framework. This ensures the teaching of Maths is always building on prior learning and the embedding of concepts through their application



Medlock's Maths Mastery Approach

Teaching for mastery is based on the belief that all children can achieve in maths. The whole class is taught together with support being given to children who find a topic a challenge to assimilate.

All children are given challenging questions within an area of study that are matched to their understanding and that are designed to deepen their knowledge. It is the expectation that all children can achieve greater depth.

Concepts are built in small, progressive 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 to enable the children to make the jump from the concrete to the abstract.

Lessons are presented coherently and selected carefully (based on the teacher's knowledge of what their cohort of children need) so as to ensure all pupil get what they need to progress through their learning and be ready for what comes next.

Substantive Concepts

The curriculum is designed so that pupils revisit and further develop their understanding; constantly building on the the learning that has come before. This better enables a mastery approach fro all pupils. In Mathematics, the substantive concepts are number fluency, geometry, measure, statistics and fractions.

Impact in Maths

Our curriculum is designed so the children are taught the knowledge needed and then to apply the knowledge within the subject and beyond. It has been designed to build children's knowledge from lesson to lesson and from one year to another, linking backwards and forwards, embedding knowledge and understanding. We constantly return to key concepts, as a result children know more and remember more.

Our children will be able to explain, describe, justify, and prove their understanding of Maths. They will be able to deepen their understanding by asking questions and by using mathematical language to articulate this. Through an enriched Maths curriculum, children will not only strengthen their understanding of Mathematical concepts, but will leave Medlock with the vital Mathematical skills needed for high school and the real world beyond.

Links

National Curriculum 2014 -Maths Programmes of Study.
[Click here.](#)

The 'PA' Approach
[Click here](#)

'The only way to learn mathematics is to do mathematics.' - Paul Halmos

'Maths is my favourite! I love to solve puzzles. Even if they are a bit stressy I know I've got the strategies to find the answer!' - Kalel 5CD

'Mathematics is an integral part of every school curriculum. It is a foundation of many disciplines and a source of interest and enjoyment in itself. It also unlocks the door to further study and employment in a vast range of fields.'
Amanda Spielman May 2021