

Statement of intent

Our vision for mathematics at Elmhurst is that all children can become mathematicians. Through a focus on teaching for mastery, all children can succeed in maths and can learn the necessary skills. A key element of this is through developing a shared language in maths. Teachers use correct mathematical vocabulary and encourage children to do the same, rather than simplifying terms to make it “easier”. Children of all ages are expected to reason about and explain their methods and answers verbally or in writing. This accelerates their language skills as well as deepens their understanding of the mathematical concept.

We follow the Maths No Problem scheme closely in all year groups except EYFS, where a similar mastery approach is delivered in an age-appropriate way. Maths No Problem is based on the concept of a spiral curriculum so that children are always revisiting concepts previously learnt. We want our children to make links between ideas and find patterns in what they are learning. In the older year groups, the first lesson of a chapter will often recap the learning from the previous year. It is important that our children develop a deep, long-term understanding of a concept before moving onto the next year group.

Teachers plan coherently sequenced units using the text- and work-books provided by the scheme. Children in KS2 do not write in the work books, but rather are taught to journal and record their ideas in their own maths books in their own ways. To help our children become fluent in their times tables, we use Times Table Rockstars. This creates a high level of engagement and enjoyment with learning.

For those children who cannot access the Maths No Problem scheme for their year group (e.g. SEND children), we want them to learn at their pace, but make progress towards their age related goals. A small number of children are moved to a maths class of a more appropriate attainment level. For others, we draw out the underlying principles of the scheme and teach them at their own pace, using the same resources and concepts.

We want children to see maths within their wider life outside maths lessons. We hold “Maths Day” every year with a whole-school focus on an aspect of maths. We aim for this to be different to their normal maths lessons and be something that children of all ages and abilities can take part in. It is designed to be fun and often creative. Every year we host inter-year group times-table competitions to encourage children to be confident, fluent and rapid in their recall of times tables. An extremely popular times table club is also run at school where children take part in games and activities to increase their recall speed.

When thinking long term, we want our pupils to take away as much mathematical knowledge as possible as it is such a vital subject to succeed in later life. We expect that all pupils should have a solid understanding of number including place value and the four operations. As well as this, we expect that pupils take away an understanding of other concepts such as geometry and measure. In terms of skills, we want pupils to have the resilience and perseverance to attempt any mathematical problem they are given. They should be confident using facts, ideas and methods that they know, to tackle more complex problems in new situations. They should be fluent in their basic number facts so that this does not hold them back. We want them to be confident problem solvers.

Progress is tracked in both formative and summative ways. Through discussions within lessons, teachers listen to children's thoughts and understanding on their current topic. Regular journaling takes place when exploring a variety of ways to solve problems and teachers use this to view progress too. When maths books are marked, teachers can gain an understanding of how the child has understood a concept individually. End-of-chapter reviews are provided at the end of each Maths No Problem chapter and teachers use these to assess children's progress across a whole topic. Finally, formal assessments are sat three times a year for KS2, in the autumn, spring and summer.

For those children who fall behind, we have a variety of support to catch them up to their peers. A small group of children who cannot access the curriculum for their year group are taught separate from the mixed ability groups. The content of their lessons begins with where they are currently at, and then aims to progress quickly back onto their year group. We provide daily catch-up sessions in the afternoons for those children who are falling behind their peers. A number of teachers offer weekly tuition, free-of-charge, to a selection of children who could benefit from extra support.

We offer regular training to support staff with their maths teaching. INSETs are often delivered by Maths No Problem, the Maths Co-ordinator or Maths Hub Lead. We hold open mornings across our MAT schools to observe and share best practice. Newer staff or those less confident teaching maths are offered team teaching with the Maths Co-ordinator, the NCETM trained Maths Specialists or Maths Hub staff. They plan, teach and evaluate lessons together to improve their practice.

Following school closures, our maths curriculum has been adapted to reflect missed content. We use the non-statutory curriculum guidance (from the NCETM and the DfE) to prioritise some content and also to reorganise units within some year groups. This year, our curriculum focuses on the six key areas of learning as identified in the guidance to ensure our children have a deep understanding of the priority topics.

In Key Stage 1, we use the Number Sense Maths programme at the start of the year as a systematic approach to teaching number facts. We believe that our children need a solid grounding in basic number facts before they can access the rest of the curriculum.