

Maths

Mathematics provides a vital tool that helps us to understand and change the world. We want all pupils at Elmlea Schools Trust to experience the power and enjoyment of mathematics and develop a sense of curiosity about the subject alongside a clear understanding.

Our whole curriculum is shaped by our school vision which aims to enable all children to be 'forever learners'. We foster positive attitudes and a growth mindset, promoting the fact that 'We are all mathematicians!' At Elmlea, we aim for all children to be confident, successful and independent maths learners who want to challenge themselves.

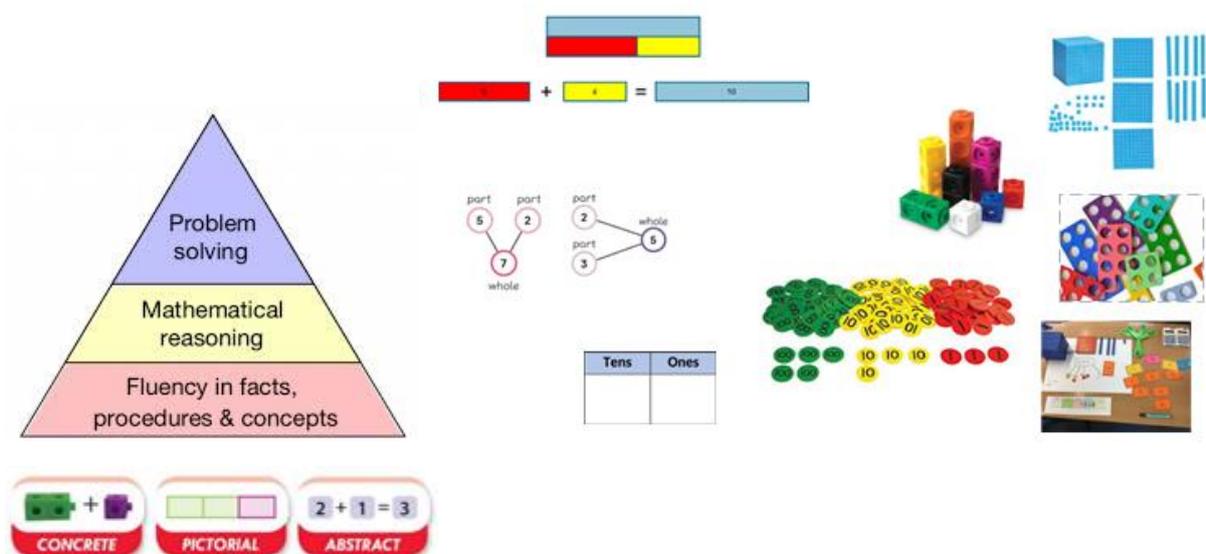
By the end of KS2 we aim for children to be **fluent** in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They should have the skills to **solve problems** by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Children will be able to **reason** mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

At Elmlea, we aim to inspire children to develop a love for maths, to be resilient and resourceful and encourage a curiosity for number which they can take with them into the wider world.

As teachers, everyday we motivate children to have a growth mindset and to not give up at the first sign of challenge. We instil a 'can do' attitude in lessons and talk about if children cannot do something, it simply means they cannot do it 'yet'.

We believe that the fundamentals of maths lie within grasping the basic concepts, such as; times tables and number bonds before moving onto more challenging calculations.

More details of the methods that we use can be found in our calculation policies. In lessons, we use fluency to teach the skill and content using a variety of different representations, we teach reasoning to encourage children to explain why they are doing something and what misconceptions they have come across whilst doing it. Problem solving is a skill that is taught by making connections, drawing on prior knowledge or deciphering the information needed.



[Hyperlink to curriculum map and curriculum map +](#)

We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. We believe all children can achieve in mathematics and teach for secure and deep understanding of mathematical concepts through manageable steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems. They will spend time becoming true masters of content, applying and being creative with new knowledge in multiple ways.

Across the trust, mathematics is taught daily by the class teacher. In EYFS discrete maths teaching is supported by high quality continuous provision and targeted objectives (will flesh this out) Units of maths are taught in blocks but pupils continuously make links across these areas of learning. These daily sessions will often include a re-cap of previous learning and tackle misconceptions. New skills and vocabulary are introduced and reinforced using working walls and children have the time to consolidate and apply their knowledge. In the Infant School we use the Mastering Number scheme from the NCTEM. These are short, discrete sessions on number taught 4x a week which aim to provide children with a deep understanding of the composition of number.

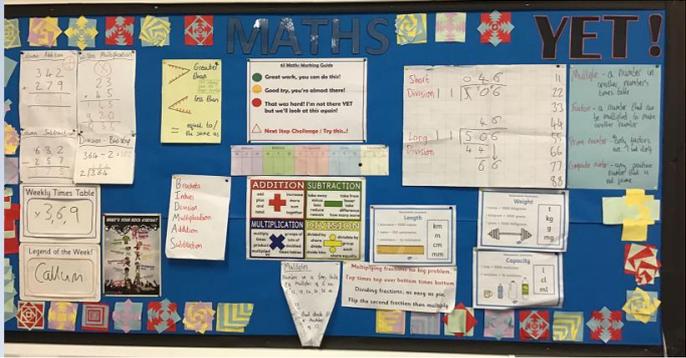
The expectation is that the majority of pupils will move through the units at broadly the same pace. However, decisions about when to progress are always based on the security of pupils' understanding and their readiness. Pupils who grasp concepts rapidly are challenged through being offered problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material have the time and support to consolidate their understanding before moving on. In KS2, children are grouped so that the curriculum can be effectively adapted to meet their needs.

At Elmlea, we provide various maths enrichment opportunities to give children real-life experiences, help them make links and compete at the highest levels. These include city-wide interschool challenges, 'maths bees', money week and we celebrate significant figures in the STEM world.

Our curriculum is also enriched by the use of the following online learning platforms: Times tables Rock Stars, Mathletics and Doodlemaths. Achievements in these are recognised and celebrated across the school.

Impact

- Pupils and their work (check permissions/consent)
- Lesson slide example
- Learning environment/ display/ resources
- Pupil voice quotes
- Vocab



Millie Crook, Laura Sheffield & Tom Weller