

Mathematics Curriculum Intent - what do we want to achieve?

At Emerson Valley, we are committed to ensuring that all of our pupils become fluent in the fundamentals of mathematics, are able to reason mathematically and can solve problems by applying their knowledge in a range of contexts.

- We are dedicated to enabling children to recognise the importance of mathematics in the wider world so that they can use their mathematical skills and knowledge confidently in a variety of situations in their lives.
- We want all children to enjoy mathematics and to develop a deep and sustained conceptual understanding so that they can experience success in the subject.
- We aim for pupils to achieve mastery of mathematics by acquiring a deep, long-term, secure and adaptable understanding of the subject.
- We seek to develop children's curiosity about the subject, as well as an appreciation of the beauty and power of mathematics.

Mathematics Curriculum Implementation – how do we deliver our curriculum?

The content and principles of the 2014 National Curriculum and the Teaching for Mastery approach convey how mathematics is implemented at Emerson Valley.

Mathematics is taught coherently and sequentially in Years 3 to 6 using the White Rose Maths schemes of learning. Units of learning are broken down into a series of small, connected steps with each building on the children's prior learning. Each lesson focuses on one small step or a series of small steps. Learning throughout the school is introduced using a concrete, pictorial and abstract approach so that pupils develop a conceptual understanding of mathematics through a variety of manipulatives and representations.

Teachers plan and deliver lessons to address the needs of all pupils with the use of scaffolding, skilful questioning, rapid intervention and carefully designed enriching activities. The vast majority of pupils progress through the programmes of study at broadly the same pace. Pupils who grasp concepts rapidly are challenged by being offered rich and sophisticated problems before any acceleration to new content. Those who are not sufficiently fluent with earlier material consolidate their understanding, including through additional practice, before moving on. Teachers aim to rapidly address gaps in children's understanding within the lesson and through targeted intervention outside of the lesson. Consistency in teaching mathematics across the entire school is achieved by teachers planning and delivering lessons with the aid of high-quality and rich resources including; White Rose Maths materials and other mastery resources from NCETM, NRICH and subscription websites.

Mathematics Curriculum Impact – what are the outcomes of our curriculum for pupils?

The impact of our curriculum on pupils' development of mathematical knowledge and skills is measured formatively and summatively. Regular and ongoing assessment by teachers and the use of online nationally benchmarked assessments informs teaching, as well as intervention, to support and enable the success of each child.

In-school moderation of teachers' assessments is conducted by year group teams, the Mathematics Leader and Senior Leaders. Teaching and learning are rigorously monitored to ensure that pupils make good progress across the school.

These factors ensure that we can maintain high standards in mathematics, with achievement at the end of Key Stage Two higher than the national average and a high proportion of children demonstrating greater depth at the end of each phase. Upon completion of Year 6, our curriculum enables pupils to be fully prepared and equipped to successfully continue their mathematical learning journey at secondary school and in their later lives.