

“The study of mathematics, like the Nile, begins in minuteness but ends in magnificence.”

Charles Caleb Colton

Furneux Pelham School Curriculum

Statement of Intent, Implementation and Impact

Subject: Maths

Subject Leader: Louise Foley

Intent

At Furneux Pelham School our intent for mathematics is to teach a rich, balanced and progressive curriculum using maths to reason, problem solve and develop fluent procedural competence and deep conceptual understanding. We deliver lessons that are engaging and enable children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. We intend for our pupils to be able to apply their mathematical knowledge to science and other subjects. We are committed to ensuring that children are able to recognise the importance of maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts.

We want all children to enjoy mathematics and to experience success in the subject. Whilst we place great importance upon mathematical fluency, we feel it is essential that our pupils are sufficiently confident in this area in order that we can then spend most time focusing upon reasoning and problem solving skills. It is these skills which will allow them to truly flourish mathematically. We are committed to developing children’s curiosity about the subject, as well as an appreciation of the beauty and power of mathematics.

Implementation

Teaching and Learning, Content and Sequence

Mathematics at Furneux Pelham School is planned for following the EYFS Framework and KS1 and KS2 National Curriculum. Mathematics teaching follows the Learning Sequences written by Herts for Learning in Essential Maths. Whilst the National Curriculum forms the foundation of our curriculum, we make sure that children learn additional skills, knowledge and understanding and enhance our curriculum as and when necessary using resources such as Mastery documents from the National Centre for Excellence in Mathematics and the White Rose Maths Hub.

Mathematics is taught daily across the school. In order to develop the application of Mathematics to other subjects, on a Friday Maths is taught through Science across the school. Where possible, Mathematical algorithms are practised outside of Maths lessons in sessions such as Early Morning Maths, Method of the The Moment or Fluency Fifteen. This is in order to maximise time spent in lessons developing reasoning and problem solving skills.

Systematic teaching of number and place value has a high priority throughout school.

Beginning in the Foundation Stage, pupil fluency is developed by using a visual, practical base to develop conceptual understanding and recall. Pupil's mathematical reasoning is developed through the use of concrete objects and spoken language to explain and justify. Manipulatives are used throughout the school, regardless of age and stage. Learning in all year groups progresses through concrete, practical and abstract stages.

The school has developed a comprehensive Calculation Policy, which enables staff to teach standard methods systematically and progressively across all age groups. The systematic teaching of times tables ensures that children develop rapid recall which they can use as a tool to effectively and efficiently solve more complex problems.

Leadership, Assessment and Feedback

Using the suite of diagnostic tests in Herts for Learning's Essential Maths, intervention is planned for those children not just for those who are working below their expected level of attainment and progress, but for any child at any level of attainment who displays gaps in learning. Where progress is limited or children remain working towards the expected level of attainment, longer term sequences of support are put in place using Learning Sequences from HfL Essential Maths and other intervention programmes.

Impact

Children at Furneux Pelham School understand and value the importance of Mathematics, this is evident through pupil voice and monitoring, which takes place every half term by the subject leader.

We want children to be confident in making rich connections across mathematical ideas as a result of developing fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. Our pupils will be able to apply their mathematical knowledge across the curriculum and to realise that mathematics has been developed over centuries, providing the solution to some of history's most intriguing problems. As our pupils progress further in their education, we intend for them to be able to understand the world, have the ability to reason mathematically, have an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Through high quality first wave teaching, guidance and effective feedback, children will achieve age-related expectations by the end of each year group. By the end of Key Stage Two, children will leave our school prepared for the next step in their mathematical education. At least one third of the cohort will have understood the curriculum for mathematics at greater depth within the standard for their age group.

Summative assessment takes place at the end of each term and children's progress and attainment is discussed with senior leaders in pupil progress meetings. Formative assessment takes place on a daily basis and teachers adjust planning accordingly to meet the needs of their class. Attainment and outcomes in mathematics have a prominent focus throughout our academy.