Overview of Mathematics at Eastbury Farm Primary School

School Vision:

Children leave Eastbury Farm having been inspired to become confident and successful learners, ready to explore their future as resilient and responsible individuals.

Maths Vision:

Children leave us as fluent and confident mathematicians, who understand that mathematics is a fundamental part of everyday life and the world that we live in. We create individuals who have a positive attitude towards maths and who can reason mathematically and apply their skills in a range of different contexts.

Intent:

Throughout our Maths curriculum, we plan creative and engaging lessons that will give our pupil's a range of opportunities to explore mathematics through a mastery curriculum. We intend to give each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges. Throughout our teaching, we want the children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning, and competence in solving increasingly sophisticated problems.

The National Curriculum Strands in Mathematics:

Early Years Foundation Stage:

There are two key Early Learning Goals for Maths:

- Number: Number composition, subitising, recall of bonds to 5 and 10 and doubling
- Numerical Pattern: Verbally count beyond 20, Compare quantities, explore and represent patterns

Key Stage 1 and Key Stage 2:

Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
-Number and Place Value -Addition and Subtraction -Multiplication and Division -Fractions -Measurement -Geometry-properties of shapes -Geometry-position and direction -Statistics	-Number and Place Value -Addition and Subtraction -Multiplication and Division -Fractions including decimals -Measurement -Geometry-properties of shapes -Geometry-position and direction -Statistics	-Number and Place Value -Addition and Subtraction -Multiplication and Division -Fractions including decimals and percentages -Ratio and proportion -Algebra -Measurement -Geometry-properties of shapes -Geometry-position and direction -Statistics

Mastery is a continuum. We believe mastery is only going to be achieved when planned time is spent on key concepts that are revisited and reviewed. We know that unlocking mathematical fluency is an essential life skill for all learners and is pre-requisite to being able to reason and solve problems. Our curriculum allows for the development of basic

Implementation:

What is our teaching approach to delivering Mathematics?

Throughout their time with us, the children will build upon, develop and apply their mathematical skills though a progressive curriculum. We ensure that there is breadth and balance within each strand of mathematics, that it is relevant and engaging and that it is differentiated to match the needs and abilities of all our children. We place a great emphasis on the use of concrete manipulatives, pictorial representations at all ages, to enable the children to fully understand the concepts and principles, when presented with abstract calculations and questions.

Early Years Foundation Stage

In line with the new EYFS framework, we follow the Herts for Learning Reception Essential Maths Scheme. We understand the importance of early experiences of Maths and we place a significant emphasis on developing a strong foundation in number by:

- Providing pupils with a range of hands-on mathematical opportunities where they are encouraged to explore, sort, compare, count, calculate and describe objects
- Purposeful play-based experiences that are represented through our indoor and outdoor provision
- Clear progression in skills so that as pupils progress throughout the year, more emphasis is placed on representing their mathematical knowledge through more formal experiences where they will be encouraged to record their mathematical thinking

Key Stage 1 and Key Stage 2

In line with the National Curriculum, we follow the Herts for Learning Essential Maths Scheme. The sequences are written as a spiral curriculum in which learning is built upon step by step, sequence by sequence and year on year. Each sequence of learning involves 'steps' which have been closely matched to create a shared progression through the key concepts. Throughout each Maths lesson the pupils are provided with:

- Fluency, Reasoning and Problem Solving: Each lesson includes the opportunity to develop fluency skills, reason using relevant knowledge alongside the relevant terminology and solve increasingly complex problems in a systematic and coherent way
- Mathematical Vocabulary: Lessons include explicit reference to vital mathematical language, and we use speaking frames to support and encourage all children to communicate their ideas with mathematical precision and clarity
- Ongoing opportunities to consolidate key ideas and work at greater depth: When pupils are provided with greater depth challenges, they are within the context of

Impact:

Children will have developed a deep understanding of Maths. They will have a bank of efficient strategies and accurate skills that can be used to calculate effectively and will have the language to justify, reason and explain their answers.

Children's knowledge and skills will develop progressively as they move through the school, not only to enable them to meet the requirements of the National Curriculum but to prepare them to become competent mathematicians throughout their education and lives.

At the end of Year 4, pupils will sit a national statutory multiplication test (MTC)

At the end of Year 6, pupils will participate in taking Standardised Assessment Tests (SATs) learning

mathematical skills and allows for the development of depth and sufficient practice to embed learning. Devoting time to key concepts enables us to: • Represent concepts in lots of different ways using a range of concrete manipulatives, pictorial representations and abstract symbols • Teach processes, that allow the children to apply their knowledge, increasingly rapidly and accurately • Commit key facts to the children's long-term memory Therefore, at an age-appropriate level, we expect that the vast majority of our children will be able to: • Recall key number facts such as number bonds and times tables with speed and accuracy and use them to calculate and work out unknown facts • Use mathematical concepts such as facts and procedures appropriately, flexibly and fluently • Have sufficient depth of knowledge and understanding to reason and explain mathematical concepts and procedures and use them to solve a variety of problems	their age-related curriculum, rather than accelerating through content for the year group above • Weekly fluency sessions in Key Stage 1 and Lower Key Stage 2 to develop number fluency and times table strategies • Weekly sessions in Upper Key Stage 2 to recap and embed mathematical learning **Interventions** Teachers believe that all children can achieve in maths and focus on whole class teaching. Where prerequisites are not secure, pupils will receive additional support through timely interventions that have focused objects to help them progress.	**This will be evidenced through continuous monitoring carried out by the Subject Leader through:** • **Learning Walks** • **Pupil Voice** • **Book Scrutiny** • **Planning Scrutiny (that is progressive and builds upon children's existing skills and knowledge)**

Subject Leader Expectations:

- 1 hour of Maths teaching/learning in each class per day
- In EYFS they plan from HfL Essential Maths
- In KS1&KS2 planning is from HfL Essentials Mixed Age Planning
- Fluency Friday focusing on number fluency and times tables in KS1 and LKS2
- Class Teachers track back through the curriculum to secure foundational knowledge
- Pupils make corrections and respond to all next step marking
- Improvement marking using purple polishing pens
- Maths toolkits which include concrete manipulatives are to be used to support and extend all learners
- There is some evidence of pictorial representations and reasoning in books
- Assessment of pupils to be carried out using the Herts assessment sheets for all strands to be completed as an ongoing process
- Maths moderation to be carried out across year groups and Key Stages
- Pre-teaching of vocabulary and gaps as well as keep-ups and specific Maths interventions are to be put into place for children where needed
- Class teachers to inform Maths Subject Leaders when resources are missing or stock needs replenishing