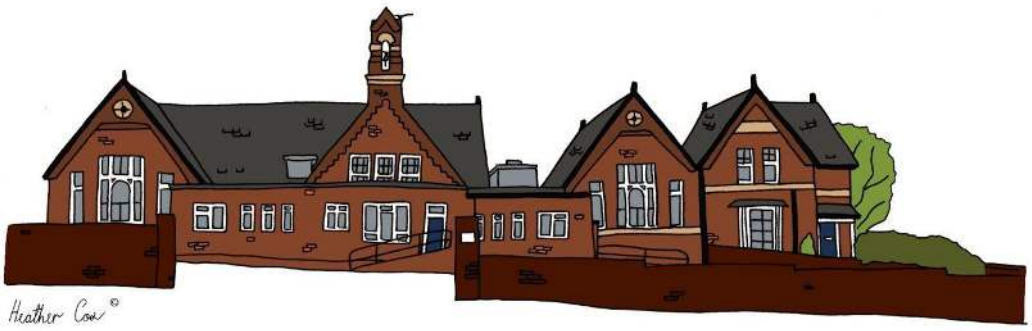

Stebbing Primary School
Mathematics Policy

Created/updated June 2024
Ratified June 2024
Due for review February 2028

Introductory statement

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, as well as promoting a sense of enjoyment and curiosity about the subject.

Aims of the national curriculum

The national curriculum for mathematics aims to ensure that all pupils:

- Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasing complexity over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **Reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- Can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems with increasing sophistication, and into a series of simpler steps and persevering in seeking solutions.

(National Curriculum July 2014)

The teaching of mathematics at Stebbing Primary School is geared towards enabling each pupil to develop to their full potential using a mastery approach. We endeavour to not only develop the understanding of their mathematical skills and understanding required for later life, but also an enthusiasm and fascination for maths itself.

Pupil confidence is also very important to us and all teachers create a learning environment where mistakes are celebrated as learning opportunities so pupils are able to express themselves and their ideas using the language of maths with assurance.

Assessment

Please see our assessment policy and mathematics flow diagram.

Teaching methods and approaches

All staff at Stebbing Primary School are using the Maths Mastery approach to teaching maths. Lessons have a flexible approach to ensure that pitch and pace suits all of the children. Teachers use their own judgement in how to approach teaching a concept and will incorporate group, paired or individual work where it is needed based around a CPA approach (concrete, pictorial & application). Teachers also adopt the pre teach, teach and re-teach approach, where necessary to try and ensure that all children move on and progress together.

Pupils engage in:

- The development of mental strategies
- Written methods
- Practical work with Montessori equipment and other physical manipulatives
- Investigational work
- Problem-solving
- Mathematical discussion using precise mathematical language; including question stems
- Consolidation of basic skills and routines
- Utilising the opportunities for cross curricular work, where appropriate
- An understanding of how maths is used in everyday life

Teachers are embedding regular opportunities for depth and breadth for all and this can be evidenced in the children's books where 'Dive Deeper' stickers are used as well as giving the children opportunities to use marking stations and have their work actively marked during lessons to enable them to gain instant feedback and the chance to rectify any mistakes they may have made. Teachers question carefully and provide lots of opportunities for mathematical skills to be evidenced and proven in more than one way.

Mathematics in the Early Years

In our Early Years class the teaching of maths is based on the Early Years Foundation Stage (EYFS) framework. This gives us the basis of what children must experience and learn across the year. Weekly lessons are planned from this for the whole class to access, and adults then take opportunities to include, develop and challenge mathematical learning within child-led play. Montessori equipment is sometimes used, alongside other manipulatives, to develop mathematical understanding within the classroom, particularly for the teaching of early number and calculation. These materials are constantly accessible by all children. In the Early Years our aim is to make maths fun, engaging and practical.

KS1 also utilise the NCETM 'Mastering Number' programme and this is embedded in their daily practise.

Children with special educational needs

All children receive high quality inclusive teaching. Where children have a special educational need in maths, where possible they are fully included in the daily mathematical lessons so that they benefit from oral and mental work and can also engage in mathematical discussion with others. There are high expectations for all pupils. Resources are provided to encourage children to learn independently and support their learning. If required, adaptations will be made through the use of physical manipulatives or adult support. Specific intervention groups will run for those children that need extra support in a particular area of learning.

If a child's needs are particularly severe they will work on an individualised programme discussed and planned with the appropriate staff. and SENCO.

Homework

Please see our homework policy.

Reporting

All parents receive an annual written report on which there is a summary of the child's progress in mathematics over the year. We also hold two family consultations a year where successes in mathematics can be celebrated.

Other policies and documents to be read in conjunction with the Mathematics policy:

- Marking policy
- Assessment policy
- Homework policy
- SEN policy