

Maths Policy



THE FEDERATION OF
LITTLE HALLINGBURY AND
ST MARY'S HATFIELD BROAD OAK
CHURCH OF ENGLAND PRIMARY SCHOOLS



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Ratified by the Governors on:	
Signed:	

Mathematics Policy

Introduction

Mathematics teaches children how to make sense of the world around them through developing their ability to calculate fluently, reason and solve problems. It enables children to understand relationships and patterns in both number and space. Through their growing knowledge and understanding, children learn to appreciate that it is essential to everyday life, critical to science, technology and engineering, and necessary for finance and most forms of employment. With all of this in mind we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them for the rest of their lives.

The National Curriculum for mathematics (Sept 2013) details what pupils must learn in each year group. Combined with our Calculation Policy, this ensures continuity, progression and high expectations for attainment in mathematics for all pupils.

We are committed to ensuring that all pupils achieve mastery in the key concepts of mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education. Assessment for Learning, an emphasis on investigation, problem solving, the development of mathematical thinking and development of teacher subject knowledge are therefore essential components of the approach to this subject at St Mary's.

Aims

Our aims in teaching mathematics are:

- to promote enjoyment and excellence in learning through practical activity, exploration, investigation and discussion;
- to understand the importance of mathematics in everyday life;
- to develop children's ability to move between concrete and pictorial representations fluently and confidently;
- to develop a deeper understanding of using numbers and the number system;
- to develop an understanding of the connectivity of patterns and relationships within mathematics;
- to develop the ability to apply knowledge, skills and ideas in real life contexts outside the classroom, and become aware of the uses of mathematics in the wider world;
- to enable children to select and use a range of mathematical tools effectively;
- to equip children with the mathematical language needed to understand problems and explain their methods and reasoning;
- to ensure that all pupils make at least expected progress across all year groups, including those in identified vulnerable groups, and many children exceed national expectations;
- to promote and provide opportunities for children to develop the core learning skills of confidence, perseverance, curiosity, cooperation, independence and communication.

Mathematics planning

Mathematics is a core subject in the National Curriculum (Sept 2013) and we use the objectives from this to support planning and to assess children's progress. Our Calculation Policy outlines the approach and learning progression in the main operations of addition, subtraction, multiplication and division. Staff use medium term planning to ensure coverage of all areas of the National Curriculum and the NCETM Teaching for Mastery documents to ensure that pupils master the content taught in each year group. Class teachers complete weekly mathematics plans. These weekly plans detail the learning objectives for each lesson and give details of how the lessons are to be taught. The class teachers annotate according to the success of the lesson and assess pupils' learning against objectives.

Early Years Foundation Stage

We teach mathematics in our Foundation Stage where we relate the mathematical aspects of the children's work to the objectives set out in the Early Learning Goals. We give all the children many opportunities to develop their understanding of number, measurement, pattern, shape and space, through varied activities that allow them to enjoy, explore, practise and talk confidently about mathematics.

Links with other curriculum areas

We have a flexible and creative theme-based curriculum, and although much of the mathematics is taught during a daily maths lesson, we constantly seek to make meaningful cross-curricular links through our themes in order to embed maths into the bigger picture of each child's learning, and to provide real-life relevance to the concepts and skills that they are acquiring. Sometimes the maths objectives may be taught as part of another subject area, and other times the other curricular objectives may be taught as part of maths. Opportunities to do this may be identified at either the long-term, medium-term or short-term planning stage.

Mathematics and Computing

Information and communication technology enhances the teaching of mathematics significantly. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers can use software and ipad apps to present information visually, dynamically and interactively, so that children understand concepts more quickly. Children may use ICT in order to learn or apply mathematical concepts and skills either within maths lessons or in other curriculum areas.

Marking and feedback

The marking of the children's work is kept in line with the school's Marking and Feedback Policy. Marking should communicate to a child whether they have been successful in meeting the objectives, provide next steps for the children and to inform a teacher's future planning in terms of any misconceptions the children are displaying.

Written comments in pupil books are focused on moving learning forwards and encourage perseverance and the deeper understanding of a concept. The pupils are encouraged to respond both verbally and in written form to the teachers' marking and feedback. Pupils are given time during lessons to reflect on previous learning and respond to feedback.

Maths Learning Environment

We aim to create a rich and stimulating maths environment that promotes learning and independence through maths working walls in each classroom. Maths working walls and resource areas in the classroom will:

- Support the children with their maths;
- contain information relevant to current teaching (key vocabulary, models/images, success criteria)
- include maths resources clearly labelled and accessible for the children;
- be clear/large enough for children to read;
- be changed regularly so it doesn't become just 'wallpaper'.

Resources

A bank of essential mathematics resources are kept in each classroom. Further resources relating to key whole school topics are kept in the maths resource area situated in Class 4. The subject leader will monitor and order any new resources that are required.

Home/school links

We aim to raise the profile and understanding of our approach to mathematics with parents, and they are encouraged to be actively involved in supporting children's learning in school. In collaboration with a group of parents we developed a set of calculation guides to help parents to understand how their children are taught to calculate and the methods and strategies that we use in school.

Homework is sent home as appropriate in order to reinforce concepts and skills being learned in school. (See Homework Policy).

Assessment for learning

Assessment for learning is embedded into each lesson and teachers use assessment for learning techniques and strategies on a daily basis such as: effective questioning, clear learning objectives, the use of success criteria, effective feedback and response in their teaching and marking and observing children participating in activities. This assessment is used in order to identify pupils' strengths and difficulties, inform the next steps for each child's learning and improve the learning outcomes for each child. Short-term planning is constantly reviewed and modified on the basis of these ongoing assessments.

Summative assessment

We make half-termly summative judgements of every child's achievement. We have developed a new system of assessing without levels in line with the New National Curriculum, in line with assessment guidance from the DfE. These summative judgements are made against objectives set out for each year group and are entered onto the Target Tracker system.

Each year band has been broken down into six steps:

- beginning **(b)**
- beginning + **(b+)**
- working within **(w)**
- working within + **(w+)**
- secure **(s)**
- secure + **(s+)**

We use these judgements to assess progress and achievement against individual, school and national targets. We identify and target those children not making expected progress and intervene accordingly.

There is a national expectation requiring that each child is assessed against the outcomes for their year group. There are statutory tests reflecting Year group outcomes that are carried out at the end of the EYFS, Key Stage One and at the end of Key Stage Two.

We give parents the opportunity to discuss their child's progress and attainment in teacher/parent consultations in the Autumn and Spring terms. We also write a summary of each child's progress and achievement in the Annual Report for parents.

Equal Opportunities

All staff at St. Mary's Primary School have a responsibility to maintain positive attitudes to diversity and difference, ensuring that inclusive practice is delivered throughout the school. All children, irrespective of gender, ability, ethnicity, culture or religion, and social circumstances, have the opportunity to experience a challenging and enjoyable programme of learning and development at St. Mary's Primary School.

The role of the Subject Leader

The Mathematics Leader will:

- Provide a strategic lead and direction for mathematics in the school;
- ensure teachers understand the requirements of the National Curriculum and help them to plan lessons. Lead by example by setting high standards in their own teaching.
- remain informed about current developments in the subject by attending training and conducting independent research and reading;
- share relevant information of new updates with staff;
- prepare, organise and lead CPD for all staff;
- monitor and evaluate teaching and learning of maths;
- monitor standards in the subject, through planning and work scrutiny, data analysis, quality of teaching and pupil assessments;
- order and maintain resources to enhance effectiveness of maths teaching within the school;
- develop clear action plans for maths in line with the current School Improvement Plan.

A member of the school's governing body is briefed to oversee the teaching of maths. This governor meets regularly with the subject leader to review progress.