



Maths Policy

(A STATUTORY DOCUMENT)

Publish on Website?	NO / YES
Approved by Curriculum Committee on:	9/2/2022
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This policy is linked to and should therefore be read in conjunction with:	Assessment Policy Home School Agreement Handwriting Policy Presentation Policy
Review in:	2 years (Spring Term)

Making mistakes

Achievement for all

Transferring skills

Having fun

Solving problems

'Pure mathematicians just love to try unsolved problems – they love a challenge.' Andrew Wiles

At Matching Green CofE Primary School, we are all learning with our head, heart and hands so that we can experience life in all its fullness.

When seeking to achieve our vision for mathematics, we put our Christian Values of kindness, endurance, thankfulness, forgiveness and friendship at the heart of every decision. Our vision and values are at the core of everything we do. They underpin our teaching and learning, and provide an environment which prepares our children as confident, happy citizens.

1. INTRODUCTION

'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 and necessary for financial literacy and most forms of employment. A high quality mathematical education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the power and beauty of mathematics, and a sense of enjoyment and curiosity about the subject.' (DfE 2013)

2. INTENT

At Matching Green CofE Primary School our intent for mathematics is to teach a rich, balanced and progressive curriculum using Maths to reason, problem solve and develop fluent conceptual understanding in each area. We want the children to see the importance of maths, how much we use maths skills in everyday life and its world-wide application.

Teachers and governors are kept regularly informed of developments in our curriculum via governing body meetings and head teacher reports. Lessons are child focused and maths is kept fun and current in school. Our curriculum allows children to better make sense of the world around them relating the pattern between mathematics and everyday life. Our policies, resources and schemes support our school vision. Our confident teachers do not only use one scheme or one way of working and we are constantly developing our ideas and learning from each other and from our training. Teachers use a range of resources to cover the National Curriculum targets, such as White Rose Maths and NCETM Teaching for Mastery.

The mapping of Mathematics across school shows clear progression in line with age-related expectations. Children are challenged and we believe in a child-led approach whereby children can take ownership of their learning, choosing practical materials when needed and being constantly challenged.

2.1 EQUAL OPPORTUNITIES

All children have equal access to the Mathematics curriculum, regardless of race or gender. Children access the curriculum at the level appropriate to them, ensuring rapid measurable progress. Resources and learning environments are planned and designed to enable all children access to the learning required. Differentiated activities are provided to support struggling learners and challenge rapid graspers so they are able to work at greater depth in mathematics.

3. IMPLEMENTATION

3.1 PLANNING AND TEACHING

The children have a daily maths lesson. Work is taught in blocks so that skills can be embedded and mastered, then are revisited regularly to ensure 'sticky learning' takes place. Teachers use a variety of schemes and resources to deliver lessons. Mental maths skills are taught, prioritised and practised daily.

Understanding the four rules of number, and the basic skills that go with this, is the foundation of our implementation. Teachers follow a clear progression of skills and are undergoing CPD, to embed mastery and fluency in skills and knowledge. Basic arithmetic skills are a priority. We begin with the importance of number bonds and times tables. These are taught in a variety of ways and on a regular basis to keep skills sharp. Making connections is very important e.g. number families and related division/multiplication facts. We believe in using many different ways of teaching concepts and these all begin with a visual and practical approach. For example, EYFS children look for the number 3 in the classroom and outside, and explore in their home environment. They make 3 using many different concrete apparatus, then see 3 in many visual representations. Key Stage 1 children build upon these initial concepts and begin to look at formal methods alongside practical work/visual work and modelling.

Key Stage 2 children use different concrete materials such as multi-base rods, ten frames and place value counters to embed and secure place value. They use digit cards, digit fans, dice and playing cards to consolidate skills through quick fire questioning and by playing maths games. The children use iPads and ICT games to enrich and consolidate learning.

All children learn mathematical vocabulary, which is also embedded through cross-curricular application.

Teachers will:

- Identify the appropriate teaching and learning strategies required.
- Plan lessons with a balanced and a broad range of activities.
- Plan for the specific needs of children within their own class.
- Create opportunities for children to implement key vocabulary through designated 'Maths Talk' which be evidenced on weekly plans.
- Assess children routinely using formative and summative approaches.
- Teach high quality, engaging lessons.

3.2 ROLES AND RESPONSIBILITIES

Our maths coordinators are currently receiving Mastery Readiness training, from the Herts for Learning Maths Hub, on delivering mastery through variety, visuals and representation, which is giving them even more scope and enrichment to ensure confident learners. The maths coordinators regularly lead staff meetings to deliver CPD and to discuss gap analysis and are always available for any questions that the school community has. They also present to governors regularly on the impact of this CPD on the children's learning and teachers confidence and ability.

3.3 CALCULATION POLICY

A calculation policy that outlines progression and fluency of the four operations can be found on our school website.

3.4 PARENTAL ENGAGEMENT

We involve our parents and communities in our children's learning when appropriate. Through regular mathematics workshops to support their knowledge of the school mathematical approach we enable parents to use a range of activities to create fun learning opportunities at home.

Teachers will:

- Provide parents with calculation strategies and how they can support their child at home.
- Hold a Multiplication Tables check information evening to inform parents on the test.
- Hold a SATS information session on the maths SATS paper.
- Provide logins for Times table Rockstars so children can access Maths Activities online.

3 IMPACT

The impact of our mathematics curriculum is that children understand the relevance of what they are learning in relation to real world concepts. We have fostered an environment where Maths is fun and we embrace mistakes because it is the journey to finding an answer that is the most important. Children are supported to become confident and enthusiastic learners through engaging in collaborative and independent activities. Our children learn to make connections and they make measurable progression against their own targets.

Our maths books evidence a range of activities showing examples of fluency, reasoning and problem solving. Children 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem. Children are developing skills in being articulate and are able to verbally, pictorially and in written form, reason well.

4 ASSESSMENT

4.1 Assessment is carried out informally throughout the week, and formally every half term and term as appropriate. Oral work and whiteboards are used as evidence in KS1, as well as more formal written assessments. We build upon this in KS2 through multiplication assessments, SATs tests, WRM end of unit tests and mini quizzes that are created and structured to test children on that 'sticky learning'. Assessment allows us to identify gaps and build on existing knowledge to enable sequential learning across topics.

4.2 Tracking is conducted by holding termly meetings with staff from both key stages and within key stages to highlight needs and priorities.

4.3 Interventions are planned for individual children who have specific difficulties or who have gaps that have been identified through assessment or tracking.

4.4 Monitoring is carried out by the Maths coordinators who looks at class books on a regular basis and have detailed discussions with staff regarding progress, tracking, quality of work, standards and resource requirements.