



# Fairchildes Primary School Maths Policy

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## Introduction

At Fairchildes, we believe that mathematics is a key life skill that underpins many aspects of everyday life, work, and future learning. A strong foundation in maths equips pupils with the ability to problem-solve, think logically, and make informed decisions, which are essential for their development as confident and capable individuals. We believe that maths can be both fun and challenging, offering students the opportunity to engage with exciting puzzles and complex problems that stimulate their curiosity and creativity.

Maths is integral to daily life, whether calculating household budgets, interpreting timetables, or following recipes. It provides a foundation for critical thinking and innovation and is vital in a wide range of careers.

Skilled trades like electricians, plumbers, and builders rely on calculations, measurements, and geometry to complete tasks with precision. Engineers and architects use mathematical models to design innovative and safe structures. In technology, mathematicians and programmers create the algorithms that power artificial intelligence and cybersecurity. Maths supports professionals in retail, healthcare and finance. Game developers apply probability and optimisation strategies to create engaging experiences, while designers, animators, and sound engineers use mathematical principles of proportions and spatial reasoning to create visually stunning work.

Our maths curriculum, guided by the National Curriculum for England, ensures that all pupils:

- Become fluent in the fundamentals of mathematics
- Develop reasoning and problem-solving skills
- Appreciate how mathematics applies in the real world

Through engaging teaching, hands-on learning, and real-world connections, we aim to inspire a love of maths in every pupil. We help them develop confidence in their mathematical abilities and understand how maths opens up a wide range of career opportunities. By equipping them with key skills, we prepare them for success in education, employment and the diverse opportunities of the future.

## **Aims and Objectives**

At Fairchildes, we are committed to teaching mathematics in a way that fosters excitement, creativity, and relevance, promoting a positive and confident attitude towards the subject. Our pupils will:

- Experience maths as a stimulating and engaging subject, helping to build a confident and enthusiastic approach to learning.
- Develop proficiency in essential skills, knowledge, and understanding, with an emphasis on quick recall of basic facts to strengthen mathematical fluency.
- Gain confidence in applying mathematical facts effectively in different contexts.
- Build the ability to express mathematical ideas clearly and effectively, using appropriate mathematical language.
- Foster logical thinking and use systematic approaches to solving problems.
- Understand how maths is used in everyday life, recognising it as a vital tool for communication and problem-solving.
- Be encouraged to work both independently and collaboratively, learning from others as well as developing personal responsibility.

## **Teaching and Learning**

At our school, we teach mathematics using the principles of Maths Mastery to ensure all students develop a deep, conceptual understanding of mathematical ideas. This approach promotes a strong foundation in number skills and mathematical reasoning, ensuring pupils are confident and fluent in their knowledge.

### **Key Aspects of Our Teaching Approach:**

**Fluency and Deep Understanding:** Pupils are given ample time to explore key mathematical concepts through varied practice and repetition, allowing them to achieve fluency and a deep, connected understanding. We prioritise mastering foundational skills before moving on to new content, and place a strong emphasis on pupils learning core number facts such as number bonds to 10/20/100 and multiplication facts up to

12x12.

**Representation and Structure:** We use a range of concrete materials (such as cubes, Numicon, Rekenreks, and place value counters), visual models (including tens frames, number lines and bar models), and abstract representations to ensure that pupils grasp the fundamental structures of mathematical concepts. This approach helps to develop a deep, lasting understanding of key areas such as number sense, place value, and arithmetic operations.

**Mathematical Reasoning:** We encourage students to explain their thinking and reasoning, supporting them to make connections between mathematical ideas. Through discussion, problem-solving, and enquiry, pupils develop their ability to form logical arguments, justify solutions, and articulate mathematical concepts clearly.

**Problem-Solving:** Pupils regularly apply their mathematical understanding to a variety of problems. By breaking down challenges into manageable steps, they build resilience and flexibility in seeking solutions, promoting independence and fostering critical thinking skills.

**Mathematical Language:** A strong focus is placed on using precise mathematical vocabulary. Pupils are encouraged to articulate their thinking using correct terminology, which helps them clarify their understanding and communicate ideas effectively.

**Challenge and Support:** Every child is expected to achieve, with high expectations for all learners. We offer appropriate challenges for students who grasp concepts quickly, providing rich and complex tasks to deepen their understanding. For those who need more support, we provide targeted interventions and opportunities for further practice to ensure they have the confidence and fluency to progress.

By following the Maths Mastery principles, we ensure that all pupils have a secure and lasting understanding of mathematics, preparing them for future learning and everyday life.

## **Assessment in Mathematics**

Assessment in maths is primarily carried out through Assessment for Learning (AfL), where teachers continuously monitor pupil progress during lessons, providing immediate feedback and adjusting teaching to meet the needs of all learners. This approach allows us to ensure that each pupil has the support they need to succeed. At the end of each block of learning, short summative assessments are used to evaluate pupils' understanding and to inform future planning.

In the Foundation Stage, children are assessed across the seven areas of learning and development outlined in the Early Years Framework. There is no formal assessment in this stage, other than baseline assessment. Instead, children's progress is tracked through ongoing observation and teacher judgement, with evidence being recorded in individual learning journals.

At the end of Key Stage 2, pupils will take part in statutory assessments in line with government requirements. Additionally, all pupils in Year 4 will complete a Times Table Screening Test to assess their fluency with multiplication tables. For more detailed information, please refer to the assessment policy.

## **Inclusion**

As teachers, we are committed to responding to the diverse learning needs of all our pupils, including those with English as an Additional Language (EAL), pupils with learning difficulties, and the most able learners. In line with our Maths Mastery approach, most pupils follow the same lesson, ensuring consistency and coherence in learning. However, we recognize that all children progress at different rates, and therefore we provide appropriate scaffolding and support to help every pupil succeed.

Pupils with Special Educational Needs (SEN) and EAL are fully included in the lesson, with tailored support provided to meet their individual needs. Children identified with Special Needs will receive additional support through targeted work with a teaching assistant, either individually or within small, focused groups. This may involve specific intervention programmes designed to address particular areas of need, ensuring they can engage with the lesson content at an appropriate level.

For the most able pupils, we plan activities that promote deeper thinking and greater challenge, such as higher-order questioning and extension tasks, to extend their understanding and skills. The aim is to provide enrichment opportunities that build on their existing knowledge without accelerating through the curriculum too quickly.

By ensuring that all pupils have access to the same core lesson with carefully considered adaptations, we foster an inclusive learning environment where every child is supported to achieve their potential. For further guidance, please refer to the **Inclusion Policy**.

## **Other Subject Relevant Areas**

### **Calculation Policy**

We have a clear calculation policy in place for addition, subtraction, multiplication, and division to ensure consistency in how these key operations are taught across all year groups. This policy outlines the progression of methods, from concrete resources to visual models and finally to abstract written techniques, ensuring that pupils build a strong foundation at each stage. By following this structured approach, we ensure that

all pupils develop a clear and consistent understanding of the calculations, regardless of their class or teacher. This consistency helps to support pupil confidence and fluency as they move through the school.

## **Cross-Curricular Mathematics**

Mathematical skills are developed throughout the entire school curriculum, and teachers actively seek opportunities to integrate maths across different subjects. These opportunities are especially evident in areas such as Science, Computing, and Geography, where mathematical concepts can enhance understanding and application of the subject area.

## **Homework**

At our school, we believe that learning extends beyond the classroom, and that parents can play an important role in supporting their child's mathematical development. While no formal, regular homework tasks are set, there are many ways parents can help reinforce key mathematical concepts at home. Encouraging children to engage with practical activities such as measuring ingredients for cooking, working with time (e.g., reading clocks, calculating durations), and supporting the quick recall of key number facts (such as addition, subtraction, multiplication, and division) can make a big difference to their confidence and fluency in maths.

For pupils in Year 2 and above, we strongly encourage daily use of Times Table Rockstars to help develop fluency with times tables, as this resource provides an engaging way to build essential skills. By working together at home, parents can help children make steady progress and foster a positive attitude towards learning maths.