


# Fairburn View Primary School

# Mathematics Policy

**September 2026**

**Prepared By: Leanne Hick**

**Date Taken to Governors:**

**Signed by: _____**

**Head Teacher – A Webb**

**Signed by: _____**

**Chair of Governors – Nichola Smith**

**Review Date: September 2028**

**Mathematics Policy**

**Primary School Mathematics Policy**

## 1. Vision and Rationale

At Fairburn View Primary School, we believe that mathematics is a creative, connected and essential part of everyday life. We are committed to developing confident, resilient and enthusiastic mathematicians who can reason, solve problems and think logically.

We believe that:

- All children can achieve success in mathematics.
- Mathematical understanding should be developed through rich discussion, exploration and reasoning.
- Fluency, reasoning and problem solving are equally important and should be integrated into all learning.
- Children learn best when concepts are taught in depth and connected to prior learning.
- High expectations and positive attitudes enable all pupils to succeed.

## 2. Aims

The aims of mathematics teaching at our school are to ensure that all pupils:

- Become fluent in the fundamentals of mathematics.
- Develop conceptual understanding and mathematical proficiency.
- Reason mathematically by following lines of enquiry, making conjectures and justifying their thinking.
- Solve problems by applying their mathematical knowledge in a range of contexts.
- Develop confidence, resilience and independence in mathematics.
- Appreciate the relevance and value of mathematics in everyday life.
- Achieve age-related expectations and fulfil their potential.

## 3. Curriculum Intent

Our mathematics curriculum is designed in accordance with the **National Curriculum for England** and is supported by the **White Rose Maths Schemes of Learning**, which provide a coherent, progressive sequence of learning from Reception to Year 6.

The White Rose approach aligns closely with the NCETM Teaching for Mastery principles and enables pupils to:

- Develop a deep and sustainable understanding of mathematical concepts.
- Make connections between different areas of mathematics.
- Build fluency alongside reasoning and problem-solving skills.
- Learn through carefully sequenced small steps.
- Explore concepts in depth before moving on to new learning.
- Develop confidence and resilience as mathematicians.

The curriculum is structured to ensure that all pupils access ambitious mathematical learning while receiving the support and challenge needed to succeed.

## 4. Teaching for Mastery

At Fairburn View Primary School, mathematics is taught through a mastery approach that incorporates the principles of the NCETM and the pedagogical guidance of White Rose Maths.

We believe that:

> *Most pupils progress through the curriculum content at broadly the same pace. Decisions about progression are based on the security of pupils' understanding and their readiness to access the next stage of learning.*

Teaching is characterised by:

- Small, carefully sequenced learning steps.
- Explicit teaching of mathematical vocabulary.
- Opportunities for mathematical discussion and reasoning.
- The use of concrete, pictorial and abstract representations.
- High expectations for all learners.
- Frequent opportunities to revisit and retrieve prior learning.
- Intelligent practice to develop fluency and understanding.
- Variation in questioning and examples to expose mathematical structures.

**5. White Rose Maths Approach**

White Rose Maths provides the structure for our long-term and medium-term planning and supports the delivery of a mastery curriculum.

Our teaching incorporates the key features of White Rose Maths:

- **Small Steps Learning**

  Learning is broken down into manageable steps to ensure concepts are understood in depth before progression. Teachers carefully assess understanding at each stage and address misconceptions before introducing new content.

- **Concrete, Pictorial and Abstract Approach (CPA)**

  New mathematical concepts are introduced using concrete resources before progressing to pictorial representations and then abstract methods.

  Examples include:

  - Numicon
  - Counters
  - Base ten equipment
  - Dienes blocks
  - Place value charts
  - Part-whole models
  - Bar models
  - Number lines

  The CPA approach enables pupils to develop secure conceptual understanding and make links between different representations.

- **Fluency, Reasoning and Problem Solving**

  Each lesson provides opportunities for pupils to:

  **Fluency**

  - Develop efficient calculation strategies.
  - Recall key facts accurately.
  - Build automaticity in number facts and procedures.

  **Reasoning**

  - Explain their thinking.
  - Justify methods and solutions.
  - Spot patterns and make connections.
  - Use mathematical vocabulary accurately.

  **Problem Solving**

  - Apply learning in a variety of contexts.

- Select appropriate strategies.
- Persevere when tackling unfamiliar situations.
- Evaluate and refine solutions.

**Mathematical Talk**

Teachers promote purposeful mathematical discussion through questioning, partner talk and class discussion. Pupils are encouraged to:

- Explain their reasoning.
- Compare different strategies.
- Critique mathematical arguments.
- Use precise mathematical language.

## 6. Teaching and Learning

A typical lesson includes:

- Fluency Boost
- Loopy Loops- multiplication recall
- Key Vocabulary
- Tricky Traps- potential misconceptions
- Retrieval and review of prior learning
- Explicit teaching through small steps
- Use of concrete and pictorial representations
- Guided practice and mathematical discussion
- Independent application
- Reasoning and problem-solving opportunities
- Assessment for learning and responsive teaching

The pace of learning is determined by pupils' understanding rather than coverage alone. Where misconceptions arise, teachers provide immediate support through adaptive teaching and timely intervention.

## 7. Inclusion and Adaptive Teaching

We believe all pupils can learn mathematics successfully.

Teachers adapt teaching through:

- Scaffolded support.
- Additional modelling.
- Carefully chosen representations and manipulatives.
- Flexible grouping where appropriate.
- Same-day intervention.

Pupils who grasp concepts rapidly are provided with opportunities to deepen understanding through rich and sophisticated problems rather than moving on to content from subsequent year groups. Reasonable adjustments are made to ensure pupils with SEND can access the curriculum and achieve success.

## 8. Mathematical Vocabulary

The explicit teaching of mathematical vocabulary is essential.

Teachers will:

- Introduce and model precise mathematical language.
- Display key vocabulary.
- Encourage pupils to explain their thinking using full mathematical sentences.
- Provide opportunities for discussion and reasoning.

Vocabulary progression is mapped across year groups to support long-term development.

## 9. Assessment

Assessment is used to inform teaching and improve outcomes.

### Formative Assessment

Teachers use:

- Observation
- Questioning
- Discussion
- Marking and feedback
- Low-stakes quizzes
- Retrieval activities

Assessment is ongoing and supports identification of misconceptions, identifies gaps in knowledge and informs future teaching.

### Summative Assessment

Summative assessments include:

- End-of-unit assessments
- Termly assessments
- Multiplication Tables Check (Year 4)
- National curriculum tests (Year 6)

Assessment information is used to identify strengths, gaps and intervention needs.

## 10. Intervention and Support

Intervention is:

- Timely
- Focused
- Responsive

Where possible, support is provided through same-day intervention to address misconceptions before they become embedded. Additional support may include:

- Small group teaching
- Precision teaching
- Pre-teaching
- Individual support programmes

## 11. Early Years Foundation Stage

In EYFS, mathematics is taught in line with the Early Years Framework. Children develop:

- Number sense
- Counting skills
- Subitising
- Numerical patterns
- Mathematical language
- Spatial reasoning

Learning is supported through:

- Play-based experiences
- Adult-led teaching

- Continuous provision
- Exploration and investigation

The mastery approach begins in EYFS through deep exploration of number and mathematical structures.

**12. Cross-Curricular Links**

Pupils are encouraged to apply mathematical knowledge across the curriculum, including:

- Science
- Computing
- Geography
- Design Technology
- Physical Education

Real-life contexts are used whenever appropriate to enhance relevance and engagement.

**13. Home Learning and Parental Engagement**

We recognise the important role parents and carers play in supporting mathematics learning.

The school will:

- Share curriculum information with parents.
- Provide guidance on calculation methods.
- Promote practice of key number facts and multiplication tables.
- Offer workshops and resources where appropriate.

**14. Leadership and Monitoring**

The Mathematics Subject Leader is responsible for:

- Monitoring curriculum implementation.
- Supporting staff development.
- Ensuring progression across the school.
- Analysing assessment information.
- Monitoring pupil outcomes.
- Maintaining high standards of teaching and learning.

Monitoring activities may include:

- Lesson visits
- Book scrutiny
- Pupil voice
- Planning reviews
- Assessment analysis

Findings will be used to inform school improvement priorities.

**15. Equality and Safeguarding**

This policy operates within the school's Equality, Inclusion and Safeguarding policies.

All pupils will have equal access to high-quality mathematics teaching regardless of:

- Gender
- Ethnicity
- Religion
- Disability
- Social or economic background

- Additional needs

The curriculum promotes respect, inclusion and positive attitudes to learning.

**16. Policy Review**

This policy will be reviewed annually by the Mathematics Subject Leader and Senior Leadership Team to ensure continued alignment with:

- The National Curriculum
- NCETM Teaching for Mastery principles
- Department for Education guidance
- School improvement priorities