



Farley Hill Primary School

Mathematics Policy

Responsibility of	Curriculum Committee
Date of Policy	November 2025
Date of Review	November 2026

Subject

Mathematics is a core subject within the National Curriculum.

We want all children to develop curiosity and confidence to think like mathematicians.

Mathematics has been developed over centuries and is essential for everyday life and most forms of employment. It equips pupils with a uniquely powerful set of tools that they will all need to understand and apply. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways. Mathematics helps us to analyse information, communicate ideas, make predictions and explain or justify our reasoning.

Aims

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 increasingly complex problems 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 into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage.

Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on. We create a growth mindset and an ethos where children believe they can achieve highly.

Delivering the Curriculum

In the Foundation Stage elements of mathematics are explored through the Early Years Foundation Stage Framework **(Development Matters – check with HH)**

In KS1 and KS2 mathematics is taught following the guidance laid down in the National Curriculum.

Please see curriculum coverage for each year group on the Learning Platform.

Lessons include opportunities to develop mental strategies and improve recall of number facts. Activities are clearly differentiated to extend, support and challenge all learners. Children are regularly asked to explain their strategies and reasoning orally, pictorially and in writing. Plenaries are used, as appropriate, to summarise key facts, sort out misconceptions and to link ideas.

The teaching of mathematics will include the following opportunities for the teacher to:

- Direct - share learning objectives with the class and ensure that the class know what to do and how to set out their work.
- Instruct - give information clearly in a well-structured way, e.g. how to multiply a three digit number by a two digit number.
- Demonstrate - e.g. how to use a protractor,
- Explain and illustrate - give the meaning of a mathematical term.
- Question and discuss - used to maintain and keep all pupils involved, and to assess understanding.
- Set problems - related to everyday situations.
- Consolidate - give opportunities to practise and develop what has been taught.
- Evaluate pupils' responses - identify and correct any misconceptions.
- Summarise/Plenary - review what has been taught and what pupils have learned.
- Assess - formally and informally.

Talk for Maths:

As part of the maths curriculum children are given opportunities to:

Imitate:

- The teacher models a method
- The pupils copy the method and practise its use
- Pupils are working within their comfort zone

Innovate:

- What if.....
- A parameter is changed
- Pupils may experience cognitive conflict at this point
- Learning happens

Invent:

- Pupils explore the realms of possibility

- Pupils create their own maths
- Understanding is deepened

‘Working Walls’ are used in all classrooms to support the learning and teaching of maths (see Appendix 1).

Organisation

Children learn individually, in groups and as a whole class. We take part in whole school maths events, e.g. World Maths Day. In addition, children are selected to represent the school at inter-schools maths competitions, e.g. National Young Mathematicians Award. Each week, 2 children from each class are selected to be awarded the ‘Maths Champion’ award in assembly in recognition of displaying a positive attitude, working hard and showing perseverance and determination. This is celebrated in assembly and communicated to all parents in our weekly newsletter, as well as names and photographs being displayed in the school hall.

We focus on helping children to:

- become fluent in the recall of number facts through frequent practise and exposure to more complex problems over time.
- be able to use reasoning skills to explore, notice patterns, discuss, explain, generalise, justify and prove using mathematical language.
- be able to solve problems by applying their maths and breaking the problems down into a series of simpler steps.
- develop perseverance and determination when seeking solutions to a problem.
- apply mathematical skills with confidence and realise their relevance to everyday situations.
- develop a sense of enjoyment and curiosity about mathematics and be encouraged to study it with confidence and a sense of achievement.

Resources

Resources are available to all teachers. Children are encouraged to bring items of interest into school to support learning. (See Appendix 2 for details of resources used to support the teaching of mathematics and how work is recorded).

Assessment

Children are assessed according to what they know and can do related to the National Curriculum. Teachers continually monitor, assess and make judgement about children’s learning.

- Teacher’s weekly plans/evaluations record any pupil who exceeds or does not achieve the learning objective.
- In both key stages pupils are assessed by test at least termly (half termly in KS2). A range of tests are used to assess children including NSI, Collins, QCA, SATs.
- When deciding on a Teacher Assessment judgement each term teachers use the results of formal tests as well as work in books, lesson evaluations and observations of children to make the overall judgement.

- Children identified as exceeding/more able in Maths are put onto the More Able, Gifted & Talented register and monitored.

Health and Safety

All trips and visitors are risk assessed. Safety is the direct responsibility of the class teacher.

Equal Opportunities

This subject will be accessible to all children irrespective of their ethnic background, gender, disability, religious or linguistic background.

We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those who are more able, those with special gifts and talents and the children who are learning English as an additional language. We take all reasonable steps to achieve this. For further details, see separate policies: Inclusion, More Able, Gifted and Talented.

Monitoring

The mathematics subject leader monitors children's learning, wall displays and carries out pupil interviews.

The mathematics subject leader monitors planning each week, supports colleagues in the teaching of mathematics and bring updates to staff meetings.

The mathematics subject leader also carries out book scrutinies, subject leader drop-ins and learning walks alongside other members of the SLT to ensure consistency and to moderate assessment judgements.

Displays/Working Wall

All classrooms from Year 1 onwards:

- Learning Goals on display
- Celebration/achievement of Learning Goals

All classrooms should display the following:

Foundation	• Months of the year • Days of the week • 1:1 correspondence
Y1	• Months of the year • Days of the week • Place value chart/poster • Key vocabulary for operation $+$ $-$ $\times$ $\div$ • 1:1 correspondence
Y2	• Months of the year • Days of the week • Place value chart/poster • Key vocabulary for operation $+$ $-$ $\times$ $\div$ • RUCSAC method for problem solving
Y3	• Months of the year • Days of the week • Place value chart/poster • Key vocabulary for operation $+$ $-$ $\times$ $\div$ • RUCSAC method for problem solving • Times tables poster
Y4, 5, 6	• Months of the year • Days of the week • Place value chart/poster – introducing decimals from Y4 • Key vocabulary for operation $+$ $-$ $\times$ $\div$ • RUCSAC method for problem solving • Times tables poster

Displays will be dynamic and reflect the current learning focus, giving children a clear point of reference to support their understanding. Teachers are trusted to use their professional judgement to include the resources and information that best meet their learners' needs, including in regard to those referenced above. Children's work should also be a feature of the displays too – even if it is a post-it note with solutions to a problem or one book on display open at a particular day's work.

Resources Used:**Scheme of Work**

The school follows objectives from White Rose Maths as a basis for planning, but teachers plan for the needs of their class and adapt this planning as is needed to challenge and support the learners in their class. Many opportunities should be given for children to apply their maths using resources from: Nrich, BEAM We Can Do It!, Collins Investigations, Collins Enriching Maths, BEAM Maths Out Loud, Abacus Solve the Problem, A&C Black Using and Applying.

Foundation Stage

At this stage, mathematical development depends on becoming confident and competent in learning and using key skills. This area of learning includes counting, sorting, matching, seeking patterns, making connections, recognising relationships and working with numbers, shapes, space and measures. Mathematical understanding will be developed through stories, songs, games and imaginative play providing a broad range of contexts in which they can explore, enjoy, learn, practise and talk about them.

Practical Resources

Individual classes hold a variety of equipment – 100 squares, multiplication grids, digit cards, counters, dice etc. There is centralised storage for additional shared equipment outside Class 3 on the shelves or in the drawers or cupboard. Children should know where to find and be able to independently access appropriate concrete resources, such as Dienes, Numicon, and tens frames, to support their learning in mathematics lessons.

Workbooks – recording of maths

Children in Foundation Stage and Year 1 record their maths work in an A4 blue book with 2cm squared paper. Children begin Year 2 using these same books, but move to A4 blue books (80pages) with 1cm squares, when appropriate. These books are used for children in Year 2, Year 3 and Year 4. In Year 5 and Year 6 children work in A4 blue books with 7mm squares. Any additional sheets are folded and stuck in or filed in an A4 folder.