Fairhaven CEVA Primary School

Maths Policy

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Signed: R Whiles
Chair of Governors

Date 29th January 2026

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Vision Statement

Our Christian school community strives to provide a variety of learning experiences for all our young people. We are here to nurture the gifts God gives us and to celebrate our differences. We encourage our pupils to explore their interests, find their talents, flourish and live life to the full. We want our children to live great lives and ultimately make a difference in the world.

Belief – Friendship – Diversity – Achieve

At Fairhaven we want everyone to be the very best they can be.

Intent

'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)

As can be seen from the above introduction, mathematics pervades all aspects of our lives and helps us make sense of our world. With this in mind, we intend to promote a wide understanding of mathematics and hope to instil enjoyment in the subject by supporting children to engage with it, build upon their understanding and promote further learning.

Implementation

At Fairhaven Primary, maths is taught for a minimum of one hour per day. It is timetabled at the same time each day to create structure and routine. We use the White Rose Maths Schemes of learning designed to support a mastery approach to teaching and learning. The schemes cover all the required statutory content and are in line with the aims and objectives of the National Curriculum (2014). The White Rose Maths curriculum focuses on pupils developing the skills of fluency in the fundamentals of mathematics, and being able to reason and solve problems.

Within lessons, teachers follow the I do, We do, You do approach. This approach allows teachers to plan low threshold / high ceiling activities and means that everyone can start at the same point with built-in extensions to stretch the thinking for all pupils. As a school, we follow a growth mindset approach and believe all pupils can achieve in maths.

Teaching for mastery

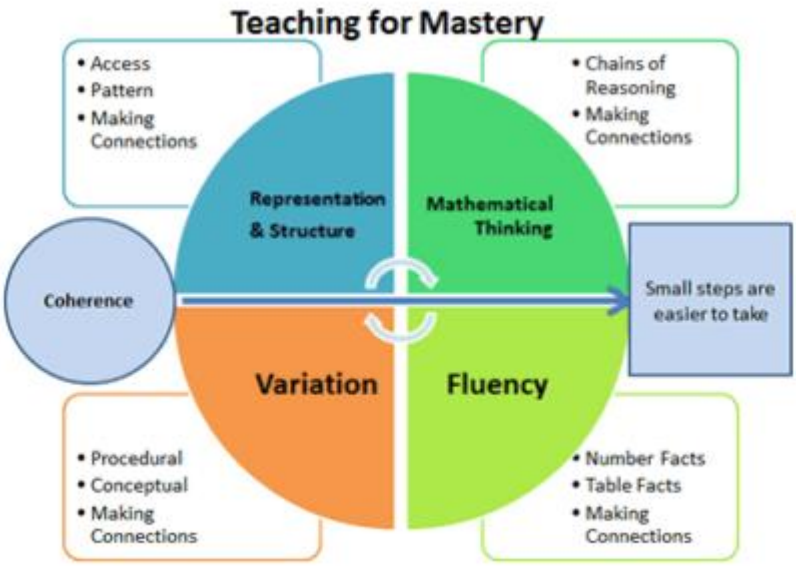
Mastering maths means pupils of all ages acquiring a deep, long-term, secure and adaptable understanding of the subject. The phrase 'teaching for mastery' describes the elements of classroom practice and school organisation that combine to give pupils the best chances of mastering maths. Achieving mastery means acquiring a solid enough understanding of the maths that's been taught to enable pupils to move on to more advanced material.

Mastery is characterised by a belief that, by working hard, all children are capable of succeeding at mathematics. On this basis, children at our school are taught all together as a class and are not split into 'prior attainment' groupings.
Carefully structured teaching is planned in small steps. This provides both the necessary scaffold for all to achieve, and the necessary detail and rigour of all aspects of the maths to facilitate deep thinking. The small steps are connected and concepts are built. This leads to generalisation of the maths, and the ability to apply it to multiple contexts and solve problems.

Teaching maths for mastery offers all pupils access to the full maths curriculum. This inclusive approach has an emphasis on promoting multiple methods of solving a problem and building self-confidence and resilience in pupils. Though the whole class goes through the same content at the same pace, there is still plenty of opportunity for differentiation.

There is no differentiation in the content taught, but the questioning and scaffolding individual pupils receive in class as they work through problems will differ. Higher-attaining children, or those pupils who grasp concepts quickly, are challenged through more demanding problems which deepen their knowledge of the same content. Those children who are not sufficiently fluent are provided additional support to consolidate their understanding before moving on. Pupils' difficulties and misconceptions are identified through immediate formative assessment and addressed with intervention or through consolidation activities.

The fundamental characteristics that underpin teaching for mastery at Fairhaven Primary are referred to as the five big ideas; representation and structure, mathematical thinking, variation, fluency and coherence.



Representation and Structure

Teachers carefully select representations of mathematics to expose mathematical structure. The intention is to support pupils in 'seeing' the mathematics, rather than using the representation as a tool to 'do' the mathematics. These representations become mental images that students can use to think about mathematics, supporting them to achieve a deep understanding of mathematical structures and connections.

Mathematical Thinking

Mathematical thinking is central to how pupils learn mathematics and includes looking for patterns and relationships, making connections, conjecturing, reasoning, and generalising. Pupils should actively engage in mathematical thinking in all lessons, communicating their ideas using precise mathematical language.

Fluency

Efficient, accurate recall of key number facts and procedures is essential for fluency, freeing pupils' minds to think deeply about concepts and problems, but fluency demands more than this. It requires pupils to have the flexibility to move between different contexts and representations of mathematics, to recognise relationships and make connections, and to choose appropriate methods and strategies to solve problems.

Variation

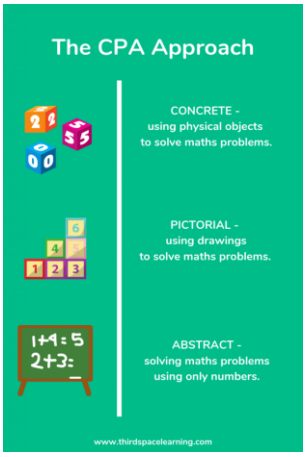
The purpose of variation is to draw closer attention to a key feature of a mathematical concept or structure through varying some elements while keeping others constant.

- Conceptual variation involves varying how a concept is represented to draw attention to critical features. Often more than one representation is required to look at the concept from different perspectives and gain comprehensive knowledge.
- Procedural variation considers how the student will 'proceed' through a learning sequence. Purposeful changes are made so that pupils' attention is drawn to key features of the mathematics, scaffolding students' thinking to enable them to reason logically and make connections.

Coherence

Teaching is designed to enable a coherent learning progression through the curriculum, providing access for all pupils to develop a deep and connected understanding of mathematics that they can apply in a range of contexts.
Our curriculum is carefully structured for continuity and progression and ordered in such a way as to make the learning of mathematics more effective. For each year group, the schemes start with work on place value, followed by the essential calculation skills pupils need to succeed in maths. Some things are deliberately taught before others, e.g. place value needs to be understood before working with addition and subtraction, and addition needs to be learnt before looking at multiplication (as a model of repeated addition). The curriculum has a strong emphasis on number skills first, carefully ordered, which can then be used and applied in different contexts. The early focus on number each year gives children confidence and helps them to access the rest of the maths curriculum. For some other topics, the order is not as crucial, e.g. shapes and statistics needs to come after number, but do not depend on each
other.

Our maths curriculum supports the visualisation of concepts and pays close attention to the structures of maths and how best to represent them. Pupils are encouraged to use a range of concrete objects and manipulatives with pictorial resources to support them in understanding the structure of maths so that they can move towards abstract understanding.



Concrete – Pictorial - Abstract

The Concrete Pictorial Abstract (CPA) approach is a system of learning that uses physical and visual aids to build a child's understanding of abstract topics.

Pupils are introduced to a new mathematical concept using concrete resources (e.g. fruit, Dienes blocks etc). When they are comfortable solving problems with physical aids, they are given problems with pictures – usually pictorial representations of the concrete objects they were using.

Then they are asked to solve problems where they only have the abstract i.e. numbers or other symbols. Building these steps across a lesson can help pupils better understand the relationship between numbers and the real world, and therefore helps secure their understanding of the mathematical concept they are learning.

Mathematical Language and Oracy

Teaching children precise mathematical language and insisting upon its use supports children's ability to think mathematically. Having the language and using it empowers children's ability to think about the concept.

Oracy is the ability to express your thoughts and ideas fluently through speech. In the maths classroom, it means pupils articulating their mathematical thinking and reasoning. Through discussion, pupils develop deeper understanding of the maths they are learning. Oracy is important in the maths classroom, as it gives pupils the chance to explore and verbalise their ideas, and to develop their thinking. It also gives teachers the chance to assess what pupils know and understand.

Maths in EYFS

Mathematics in the Reception year is developed through purposeful, play-based experiences within the indoor and outdoor provision. Mathematical understanding is developed through stories, songs, games, imaginative play, child-initiated learning and structured teaching. Pupils use a variety of different representations in their maths work and the use of STEM sentences enable children to articulate their mathematical thinking using specific language. As pupils progress, they will be encouraged to record their mathematical thinking more formally.
Within Sycamore Classroom, there is a maths area with a selection of resources that are used daily within the continuous provision and planned adult-led activities.

Maths in Key Stage 1

The principal focus of mathematics teaching in Key Stage 1 is to ensure pupils develop confidence and mental fluency. The essential idea behind the mastery approach is that all children have a deep understanding so that future learning continues to build on solid foundations. If the subject is represented using concrete materials, pictorial representations and abstract symbols, it will allow children to visualise maths in varied ways, see connections and independently explore and investigate a topic. Practical activities and resources offer the children a deeper mathematical understanding of more complex concepts.

Throughout Key Stage 1, children must gain a secure knowledge of numbers and place value. They also need to become confident when using the four operations in both formal methods as well as problem-solving where often the approach is not immediately evident. Alongside number work, pupils begin to identify fractions using shapes, objects and quantities and make connections to equal sharing and grouping.

Within Key Stage 1, pupils will also develop their ability to recognise, describe, draw, compare and sort different shapes. Pupils have the opportunity to use a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money. Pupils should read and spell mathematical vocabulary at an age-appropriate level.

Maths at Lower Key Stage 2

The principal focus of mathematics teaching in lower Key Stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. At this stage, pupils should develop their ability to solve a range of problems, including simple fractions and decimal place values. Teaching should also ensure that pupils draw with increasing accuracy and

develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measurements and numbers. By the end of Year 4, pupils should have memorised their multiplication tables up to and including the 12-multiplication table and show precision and fluency in their work.

Maths at Upper Key Stage 2

The principal focus of mathematics teaching in upper Key Stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratios. At this stage, pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties, and they learn the vocabulary they need to describe them. By the end of Year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages. Alongside the above objectives runs a desire to implement key reasoning and problem-solving skills within lessons and throughout the wider life of the school.

Other subjects may have strong links to some maths topics allowing cross-curricular teaching. For example, shapes through art or computing, measures through science or coordinates in geography. This is to ensure we continually maximise learning opportunities for all pupils across an entire curriculum.

Support for All

Where children make less than expected progress appropriate support is put in place to help support the child. No child will be denied a full curriculum and concepts will be revisited throughout the year during challenge times or intervention times to help with long term understanding. The school uses Numicon interventions in Key Stage 1 and 2 to support this.

Key Instant Recall Facts

Key Instant Recall Facts in Mathematics are known as KIRFS. These are designed to support maths skills that underpin much of the maths work in our school. KIRFs are a

way of helping children learn by heart key facts and information they need to have instant recall of. They are particularly useful when calculating, adding, subtracting, multiplying, or dividing. They contain number facts such as number bonds and times tables that need constant practice and rehearsal so children can recall them quickly and accurately.
Each half term, the children will focus on a particular KIRF and be encouraged to practice these at home – little and often is best.

Assessment
Teachers in Years 1, 3, 4 and 5 use White Rose termly assessment materials termly to measure pupil progress in maths. This data is used to check progress and for gaps in knowledge. Teachers can then plan future learning accordingly.
Pupils in Years 2 and 6 sit the national End of Key Stage test for Mathematics. To prepare for this they use past papers in the autumn and spring terms.
All data is recorded in our in-school tracking system, Sonar. The data is used at Pupil Progress Meetings so that we can track the progress of all pupils, identifying areas where more progress needs to be made.

Parental Involvement
Parents are a vital link in their child's education, and it is, therefore, crucial that parents are well informed of the methods taught in school to allow them to support their children in the most appropriate way. As a school, we proactively offer support and advice throughout the academic year. Below are the ways in which we support parents/carers within mathematics:

- Sharing our school's calculations policy to give clear guidance on the methods children use in school.
- During the academic year parents are offered an opportunity to attend maths workshops to explore how maths is taught.
- The class KIRFS for the half term are shared with parents/carers.
- Weekly maths homework activities are sent home so parents can engage in their child's maths learning.
- Children can complete Timetables Rock Stars at home.

Online Support Tools
SATs Companion is available to Year 6 children to use at home to consolidate KS2 learning. It is a comprehensive online tool providing SATs prep through questions, instant feedback on assessments, and over 100 video lessons.

Pupils from Year 2 onwards pupils have an individual login to Timetables Rockstars. This maths learning platform helps children practise their times tables. The question-

based games automatically adapt to each child's unique learning needs, helping them recall their times tables in record speed.

Monitoring and Impact

The Maths curriculum is monitored by the Maths Lead alongside the Headteacher and Governors. Monitoring tasks will include learning walks; lesson drop ins and observations; book looks; pupil voice meetings; internal moderation; data analysis and pupil progress meetings.

The impact of our Maths curriculum will be measured internally by our end of term assessment data. In Years 2 and 6, the Statutory Assessment Tests in maths will measure the success of our maths curriculum and the impact it has on our pupils.

By the time pupils leave Fairhaven Primary in Year 6 they should be able to solve mathematical problems fluently and effortlessly for them to manage the general demands of the curriculum in Year 7.

Policy Review

This policy will be reviewed every two years, or sooner if national guidance changes. Responsibility for review lies with the headteacher and Maths Lead, with oversight from the Board of Governors. It should read in conjunction with the following school policies:

- Teaching and Learning
- Assessment and Record Keeping
- Equalities Statement
- Marking Policy
- Special Educational Needs Policy
- Health and Safety Policy