

FAIRFIELD ENDOWED CE (C) JUNIOR SCHOOL

MATHEMATICS POLICY

Rationale

Mathematics is a key life skill, providing children with a means of making sense of the world in which they live. It is a proficiency which involves confidence and competence with numbers, shapes, measures and data. It requires an understanding of the number system and an ability to reason and solve problems in a variety of contexts.

Mathematics demands practical understanding of the ways in which information is gathered, presented and sorted.

Purpose

Maths offers opportunities for children to:

- Develop confidence and competence with numbers, shapes, measures and data
- Develop their fluency in numeracy and the ability to have instant recall of basic facts
- Explain their strategies and talk about their mathematics, sharing ideas with others
- Develop skills in handling data and interpreting information gathering by counting and measuring and presenting in graphs, diagrams, charts and tables.
- Learn to enjoy mathematics and have a positive attitude, approaching all problems with confidence and enthusiasm
- Develop their ability to apply mathematics to the solution of real life problems, so that they can see the relevance of what is being taught
- Reach their full potential and achieve their highest possible personal standards.

Guidelines

All children will be given equal opportunity to follow the National Curriculum Programme of Study for Numeracy.

Our mastery curriculum 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.

Teaching will take the form of whole class tuition where the expectation is that the majority of pupil's 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 pupil's 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 have an expectation that all pupils can and will achieve.
- The large majority of pupils progress through the curriculum content at the same pace. Differentiation emphasises deep knowledge and individual support / intervention.
- Teaching is underpinned by methodical curriculum design, with units of work that focus in depth on key topics. Lessons and resources are crafted carefully to foster deep conceptual and procedural knowledge.
- Practice and consolidation play a central role. Well-designed variation builds fluency and understanding of underlying mathematical concepts in tandem.
- Teachers use precise questioning to check conceptual and procedural knowledge. They assess in lessons to identify who requires intervention so that all pupils keep up
- ICT will be used to support and enhance mathematics teaching where relevant.

Conclusion

Children giving a sound understanding of numbers and measures will have a solid foundation on which to develop the ability to use mathematics for everyday life and to communicate information and ideas.

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