Freegrounds Infant School
Mathematics Policy

1. Introduction

Freegrounds Infant School is a Rights respecting school. Children and adults work together to recognise and act upon the rights of the child within our school, our local community, and the wider world. We believe that by understanding their own rights children learn to respect and value the rights of others.
In this Policy we specifically recognise the following articles from the UN convention on the Rights of the Child:

Article 3 – The best interests of the child must be a top priority in all things that affect children.

Article 29 – Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures and the environment.

Article 30 – Every child has the right to learn and to use the language, customs and religion of their family, regardless of whether these are shared by the majority of the people in the country where they live.

At Freegrounds Infant School we believe that all children have the right to learn, use and master key mathematical concepts that form the foundation of a high quality education. Mathematics is both a key skill within school and a life skill to be utilised throughout day to day experiences. By providing rich mathematical learning environments and opportunities, children will be able to explore mathematics, make links in their learning and value the purpose for it. Through the use of a broad range of resources, representations and technologies our mathematics curriculum will challenge and develop fluency, reasoning and problem-solving skills.

2. Special Educational Needs and Equal Opportunities

Freegrounds Infant School is committed to offering equal opportunities for all, regardless of race, religion, gender, ability or disability.

3. Rationale

Mathematics equips pupils with a uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving and the ability to think in abstract ways. Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them.

The National Curriculum for Mathematics (2014) describes in detail what pupils must learn in each year group. At Freegrounds Infant School we use the National Curriculum as the basis to our mathematics programme. We are committed to ensuring that as many children as possible achieve mastery in the key concepts of mathematics, appropriate for their age group. Assessment for learning, an emphasis on problem solving, calculating, the development of mathematical thinking and reasoning are essential components to this subject and enable pupils to understand and appreciate relationships and patterns in their everyday lives.

4. Aims

To enable each child to:

- Become fluent in the fundamentals of mathematics.
- Use their initiative, originality and divergent thinking to investigate and solve problems, independently and sometimes with others.
- Describe, clarify or explain how or why something has been done by offering reasoning using mathematical language and by giving examples.
- Ask questions and make predictions.
- Form and manipulate mental images.
- Develop their own methods of recording their work.

- Use appropriate mathematical skills, knowledge and apparatus to solve problems.
- Discuss strategies with others.

To teach each child to:

- Foster a positive attitude towards mathematics as an interesting and attractive part of the curriculum.
- Understand the importance of mathematics in everyday life.
- Be confident to talk about maths using the correct mathematical vocabulary.
- Use a range of strategies appropriately for problem solving.
- Think logically and systematically and to demonstrate perseverance and engagement, either as an individual or as part of a group.

4. Guidelines

During each mathematics lesson:

- The children will experience mathematics in a variety of contexts, including real life problem solving and role-play investigations.
- Teachers will give opportunities to demonstrate, explain, question, discuss, develop and consolidate mathematical skills and knowledge.
- Teachers will reinforce and revisit topics frequently.
- Teachers will give opportunities to evaluate children's responses and summarise ideas.
- Teachers will use a range of activities in mathematical teaching.
- Teachers will use all the aids available where appropriate, including computers, interactive whiteboards, games and stories.
- Teachers will develop a partnership with parents to support their children's mathematics, including home learning challenges to extend and practise skills.

5. Organisation

5.1 EYFS

The children will be taught skills, knowledge and strategies as detailed in the Early Years Foundation Stage Framework.

Although discrete sessions are planned where the teacher may introduce, explore or extend a concept with the whole class or small group, the Curriculum in EYFS follows a child-initiated approach through the use of Discovery Time, where children are given the freedom to make choices about the direction of their learning and the resources they use to facilitate this.

During Discovery Time, using their knowledge of the pupils, prior assessment and by gauging the learning taking place in front of them, adults will interact with the pupils to take their learning forward. Adults then record children's progress in mathematics on the assessment grids within the classroom and share their observations during planning meetings. Where appropriate, adults will capture observations and record these on Tapestry.

5.2 Key Stage 1

Mathematics will be taught both as a discrete subject and as part of integrated project work. There will be five discrete planned lessons a week along with additional number facts sessions twice a week. Problem solving opportunities will be planned into each unit of work.

At Freegrounds Infant School we use flexible grouping in mathematics. This is because children may be less confident or skilled in one area of mathematics (for example subtraction), but more confident and skilled in another, (for example money). As such with fixed grouping children are limited by what they are able to achieve through the group itself.

In Years 1 and 2 the class teacher will carry out an initial assessment to identify what pupils are already to achieve in the subject and what they need to learn next. From this assessment, the teacher will plan the learning experiences for the next day. For children in Year 1, these assessments will be based on prior learning from Early Years, whilst in Year 2 the children will start the year with assessments based on learning from Year 1, ensuring information can be recalled. Teachers will organise learning using a flexible approach to grouping so children work in groups alongside others who are at the same point in their learning as themselves. Throughout the lesson, teachers will giver verbal feedback and assess the children's understanding. This will enable them to offer extra support or challenge where needed. At the end of each lesson, teachers will use formative assessment to establish how far the children have moved in their learning. They will then use this knowledge to plan the learning experiences for the next day.

6. Assessment

6.1 Formative Assessment

Formative assessment is used continuously during every lesson and when children's work is being marked to identify where children have been successful and to identify and plan for next steps in learning.

6.2 Summative Assessment

Teachers will assess children's mathematical knowledge, skills and strategies in line with objectives outlined in the whole school assessment sheets which will be regularly updated to identify each pupil's current attainment in mathematics after each aspect of mathematics is taught. This information will be shared with future teachers and reported to parents at the end of the academic year.

7. Monitoring

The Maths Manager is responsible for monitoring the standards of children's work and the quality of teaching and learning. This person will support colleagues in the planning and teaching of Mathematics, by giving them information about current developments in the related areas and providing advice when and if needed. Regular monitoring will take place through the moderation of books, assessment sheets and planning. Other opportunities such as pupil conferencing and feedback questionnaires will be planned in accordance with school monitoring procedures.

8. Computing

A range of technology available will be used to teach Mathematics. Children will be given the opportunity to apply skills through a variety of games and activities, both online and school-based programmes. Opportunities will be identified on the Maths planning and they will follow our Internet and Computer Acceptable use policy.

Policy created May 2014 by Kathryn Emery
Policy reviewed November 2014 by Oliver Bradley, January 2018 by Nikki Riches, February 2021 by Ellis Webb and January 2025 by Jess Finlay.
Next review: January 2028

Version control:	V2 February 2025 Change of date for when policy was reviewed and next review. Change of date in footer. 5.2 additional comment that number there is an additional number facts session each week in KS1. 5.2 Further detail on how the HQIT approach is used to teach Maths in KS1.