

Gorse Hill Primary School

Mathematics Policy

At Gorse Hill Primary School, we pride ourselves in working together to do our best. We aim to provide equal opportunities for all members of our school family regardless of disability, religion, sexual orientation, culture, gender, ethnic origin, colour or age. All pupils have regular access to the geography curriculum, and the right to experience geography in a fun, stimulating, engaging, practical and meaningful way.

The National Curriculum states that "Mathematics is a creative and highly inter-connected 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 mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject."



INTENT

- To encourage a love of mathematics through an exciting and engaging mathematics curriculum.
- For pupils to become fluent in the fundamentals of mathematics: to develop their skills through a systematic approach of fluency, variation and reasoning.
- To encourage pupils to develop confidence in manipulating numbers, including addition, subtraction, multiplication and division.
- Pupils will be introduced to each mathematical concept through a variety of strategies and representations.
- To develop the ability to explain mathematical thinking orally and in writing using accurate mathematical vocabulary.
- For pupils to solve problems by applying their mathematical skills to a variety of routine and non-routine problems.
- For pupils to develop a deep conceptual understanding and the ability to apply knowledge rapidly and accurately.
- To develop in the children an increased competence across the mathematics curriculum for example, number, geometry, measurement and statistics.

IMPLEMENTATION



Strategies are in place within school to develop each of the key areas of mathematics, ensuring coverage of the National Curriculum 2014 and systematic coverage of key skills.

- In Nursery and Reception, objectives are taken from the Early Learning Goals to fit their current Learning Challenge.
- In Early Years, children learn through play and the continuous provision is enhanced with resources and activities to ensure all pupils meet the Early Learning Goals.
- Reception follow the Power Maths scheme of learning; which has been developed in conjunction with White Rose Maths and written by a team of Mastery Specialists and Early Years Advisors.
Reception pupils are Early Years Learning Goals
- From Year 1 to Year 6, each class follows the Power Maths scheme of learning developed in conjunction with White Rose Maths. Each lesson and concept builds on prior knowledge to help children build a deep and robust understanding of the concept before moving on. Ensuring coverage, progression, small steps, fluency, variation, problem solving and reasoning.
- A sequence of lessons will progress from developing fluency within an area and then ensuring this knowledge is embedded with a variety of representations. Following this, the children will apply their knowledge to problem solving, reasoning and explanation within that area.
- Within a lesson, children will be given opportunities to investigate areas using concrete, pictorial and abstract concepts.
- At Gorse Hill Primary School, 'Guided Practice' is fundamental to the Mastering the mathematics curriculum. Within Power Maths, each small steps starts with a 'Discover Task' where pupils are encouraged to 'have-a-go' at the new area of learning. This is followed by 'Shared Together' and 'Think Together' activities.
- Each class has a range of concrete resources available for children to freely access within a lesson.
- Teachers use a range of resources and strategies to deliver each lesson including active maths sessions, technology, practical activities.
- Children should be practicing their basic skills, number bonds and times tables at least weekly.
- A range of mathematical vocabulary is used within each lesson specific to the area of study.
- Each class will have an ongoing, interactive maths working wall containing e.g. mathematical vocabulary, models and images, sentence stems, key strategies.



IMPACT

- We know our mathematics curriculum is successful because our children are happy learners who show resilience and have developed skills to solve a range of mathematical puzzles and problems.
- Children talk enthusiastically about their learning in mathematics and make connections within their learning.
- Data collected from assessments reflects the impact of deep learning.
- Children will become fluent in the fundamentals of mathematics.
- Children will be able to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, developing an argument, justification or proof using mathematical language.
- Children will solve problems by applying their mathematics in a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering to seek solutions.
- Pupils have an understanding how mathematics is essential to everyday life, critical to Science, technology and engineering, and necessary for financial literacy and most forms of employment.



ASSESSMENT

- Children's work will be marked according to the policy of the school. The learning objective for that lesson should be made clear to each child as to whether they have fully met, partially met or have not understood it yet.
- Children should be given next steps in line with the school marking policy, to provide some element of either consolidation or challenge.
- Teacher assessments are made both formative and summative, and results entered on Target Tracker on a termly basis.
- Termly Puma assessments are completed for Y1 to Y6 (Reception in the summer term)
- Whole school learning walks, pupil interviews, book scrutiny and teacher interviews will take place regularly throughout the year by the subject leader.

Date: 08/02/20

This Policy will be reviewed annually