



Bonneygrove Primary School

"The highest standards of learning and achievement for all"

Policy Document	
Subject	Mathematics
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Signed by:  Name: Debbie Marshall Role: Subject Leader	Written by: School Author name: Debbie Marshall

Introduction

"This policy document sets out the school's aims, principles and strategies for the delivery of mathematics. It will form the basis for the development of Mathematics in the school.

Purpose of Study for Mathematics

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 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.

The school's aims for Mathematics

- 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.

The school's curriculum organisation

The school's schemes of work for Mathematics is based on the National Curriculum. The National Curriculum is used to formulate long term and short term plans on which are highlighted: SMSC, Key Skills, learning intentions and success criteria. Adaptations are made to ensure the plan is progressive in developing pupil capability. These are used as working documents to identify additional resource needs and to indicate whether extra activities have been undertaken. Every half term a formal assessment will be completed by every child (Year 1 to Year 6), for the class teacher and subject leader to inform future planning.

This scheme is cross curricular wherever possible so time frames are flexible.

Curriculum Management

The Mathematics Subject leader will:-

1. Monitor and evaluate the school's performance in mathematics by carrying out classroom observations, work sampling, pupil interviews and other appropriate monitoring methods (relating to standards and progress)
2. Assist the Leadership Team in evaluating data and in developing strategies which will secure improvement.
3. Maintain a School Evaluation Form and use this as a basis for drawing up an appropriate action plan at the end of the year
4. Identify where spending is needed and secure best value from the subject's budget.
5. Advise and support staff in their teaching of mathematics.
6. Keep well-informed about teaching and learning in mathematics and attend appropriate training.
7. Be familiar with the Scheme of Work for each year group in all key stages/stages, and to know what each class is covering in mathematics.

8. Promote and encourage a range of extra-curricular in mathematics throughout the school

Approaches to teaching

The school believes that pupils learn more effectively if they are enjoying their experiences. ICT is used across the school to motivate pupils and to support teachers with the teaching of mathematics. The school uses community and other links to expose pupils to relevant community members for example the importance of mathematics in every life, etc. Teachers provide a rich and varied input of teaching methods that motivate all types of learner. (VAK teaching), active learning to engage motivation

Cross Curricular links

Cross curricular links will be used wherever possible in the teaching of mathematics. Links to Numeracy and Literacy are shown on the plans in foundation subjects. The main approach to the curriculum is skills based. The key concepts, principles and themes are developed through cross-curricular links with the intention of giving children, teachers and teaching assistants more opportunity to work creatively. Long term planning allows cross-curricular links to be developed through topics wherever possible

Promoting British Values

Part of our vision at Bonneygrove is to prepare the children of the future to become valued members of society. Promoting British Values within the teaching of mathematics enables children to develop a sense of community and begin to understand their responsibilities and role within it.

Recording, assessment and reporting

A variety of recording methods will be used and children's work will be regularly marked with improvement comments to move the children on. Children will make improvements to their work during improvement sessions. Teachers assess children daily using classroom monitor HFL criteria. Judgements are made and data recorded termly. Reports to parents are prepared annually with regard to child's ability linked to the skills required in mathematics.

Inclusion

Regardless of a pupil's ability, ethnicity or gender the emphasis is on the whole pupil, whole school inclusive approach. We have high aspirations and expectations of all our pupils, whatever their starting points. All staff are committed in providing all children with an appropriate and high quality education within a broad-based, appropriate curriculum.

Resources and Accommodation

"A variety of resources are available in school. These include children's reference books, teachers' resources, books, big books, CD ROMs, concrete apparatus and audio/visual materials. Resources can be allocated to particular year groups to ensure progression and these are kept in the classrooms.

The Mathematics Subject leader is responsible for maintaining resources, monitoring their use and organising storage. Resource purchasing is in accordance with normal school procedures and is based upon the mathematics budget.

Mathematic Specific Resources

Each classroom has a selection of maths equipment appropriate to the age group including:-

- Numicon
- Base 10
- Bead strings
- Cuisenaire rods
- Place value cards and boards
- Number lines

Homework and involvement of parents.

Homework is set every week and is wherever possible aimed at involving parents. Children are expected to carry out homework to the same standard as in school and to meet deadlines. Parents will be encouraged to share skills and experiences with pupils where appropriate.

Health and safety

Teachers are responsible for the safe delivery of mathematics.