

The Glebe Primary School is a Rights Respecting School.

Article 29: Education must develop every child's personality, talents and abilities to the full.

Aims and Objectives.

At The Glebe Primary School we ensure a consistent approach to the high quality teaching of mathematics throughout the school.

- To develop confidence, understanding and enjoyment through a positive attitude to mathematics.
- To develop an understanding and efficient use of mathematics in meaningful contexts and to promote its importance in everyday life.
- To enable all members of the school community to understand the nature of Mathematics in today's world.
- To ensure equal access to Mathematical achievement to all children in order that they achieve their full potential regardless of gender, ethnicity or special needs and disabilities.
- To develop teachers' knowledge and confidence in all areas of Mathematics.
- To provide teachers' with clear guidelines for the teaching of Mathematics.
- To involve the use of ICT in the learning of Mathematics.
- To integrate and apply mathematical skills and knowledge within the framework of the creative curriculum.

Rationale

Mathematics equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills 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. Combined with our Calculation Policy as displayed on our school website, this ensures continuity, progression and high expectations for attainment in Mathematics.

It is vital that a positive attitude towards mathematics is encouraged amongst all of our pupils in order to foster confidence and achievement in a skill that is essential in our society. At The Glebe Primary School we use the National Curriculum for Mathematics (2014) as the basis of our Mathematics programme. We are committed to ensuring that all pupils achieve mastery in the key concepts of Mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education. Assessment for Learning, an emphasis on investigation, problem solving, the development of mathematical thinking and development of teacher subject knowledge are therefore essential components of the Glebe Primary School's approach to this subject. Within this rationale the following aims are necessary to achieve success within the National Curriculum for Mathematics (2014).

Aims for National Curriculum 2014.

- To foster a positive attitude to mathematics as an interesting and attractive part of the curriculum.
- To develop the ability to think clearly and logically, with confidence, flexibility and independence of thought.
- To develop a deeper understanding of mathematics through a process of enquiry and investigation.
- To develop an understanding of the connectivity of patterns and relationships within mathematics.
- To develop the ability to apply knowledge, skills and ideas in real life contexts outside the classroom, and become aware of the uses of mathematics in the wider world.
- To develop the ability to use mathematics as a means of communicating ideas.
- To develop an ability and inclination to work both alone and cooperatively to solve mathematical problems.
- To develop personal qualities such as perseverance, independent thinking, cooperation and self-confidence through a sense of achievement and success.
- To develop an appreciation of the creative aspects of mathematics and an awareness of its aesthetic appeal.

Principles of Teaching and Learning

The school uses a variety of teaching and learning styles in Mathematics lessons during each lesson.

Our teachers strive to:

- Build children's confidence and self esteem
- Develop children's independence
- Allow all children to experience regular success
- Contextualise mathematics
- Use practical approaches to mathematics (models and images)
- Encourage children to select independently resources to help them
- Challenge children of all abilities.
- Encourage children to enjoy mathematics

- Develop a child's understanding of mathematical language
- Learn from teachers, peers and their own mistakes.
- Allow children to ask questions as well as answer them.

Our pupils should:

- have a well-developed sense of the size of a number and where it fits into the number system (place value)
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use what they know by heart to figure out numbers mentally
- calculate accurately and efficiently, both mentally and in writing and paper,
- drawing on a range of calculation strategies
- be able to recognise when it is appropriate to use a calculator and be able to do so effectively
- make sense of number problems, including non-routine/'real' problems and identify the operations needed to solve them
- explain their methods and reasoning, using correct Mathematical terms
- judge whether their answers are reasonable and have strategies for checking them where necessary
- suggest suitable units for measuring and make sensible estimates of measurements
- explain and make predictions from the numbers in graphs, diagrams, charts and tables
- develop spatial awareness and an understanding of the properties of 2D and 3D shapes

To provide adequate time for developing Mathematics, Maths is taught daily and discretely. However, application of skills are linked across the curriculum where appropriate.

Maths Curriculum Planning

Mathematics is a core subject in the National Curriculum and we use the objectives from this to support planning along with our Abacus Pearson scheme planning tools, to assess children's progress.

Staff in Key Stage I and II use long term planning to ensure coverage of all areas of the National Curriculum and medium term planning to differentiate objectives according to the set which they teach.

It is the class teacher who completes the weekly plans for the teaching of mathematics. These weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught. The class teacher keeps these individual plans, which they annotate according to the success of the lesson.

Assessment and Recording

Assessments will be both formative and summative. Effective assessment will be achieved by

- Marking written work and formal assessment tasks.
- Teacher observations whilst children are engaged in a practical activity, to assess whether particular skills are being used.
- Pupil self-assessment and or peer assessment.
- Teacher discussions with the children in groups, class or individually.
- Annotated planning to outline objectives that have been wholly, partly or not met.
- End of term assessments to be analysed and inform future targets and planning.
- STEP's Mathematical strand profile in Foundation Stage.
- Optional Statutory Assessment Tests in Y1 Y3 Y4 & Y5
- Statutory Assessment Tests in Y2 & Y6
- Teachers to input results on the tracking system to monitor progress throughout the terms.
- APP in numeracy to focus on Number (also regard paid to Using & Applying) in Y2 and Y6 until July 2015.

Early Years Foundation Stage.

- Foundation Stage Numeracy to be taught and planned in line with new EYFS framework and transition to KSI in mind.
- In the Foundation Stage teachers will plan in line with the Early Learning Goals.
- The STEPS mathematics strand is to be completed and analysed termly to assess strengths and weaknesses.

Information and Communication Technology

Teachers should use their judgement about when ICT tools should be used, including the use of calculators.

Role of the Subject Leader / Core Group.

- To identify and address strengths and weaknesses within the subject area in school;
- To ensure that all policies, resources and curriculum documents are well organised, constantly reviewed, updated and easily accessible.
- To monitor individual children who require additional intervention and support.
- To liaise with SENCO to ensure appropriate provision for children with special educational needs and disabilities.
- To ensure that all staff and support staff are familiar with all policies, planning formats, frameworks, resources and the curriculum in use at The Glebe Primary School, and to support where necessary.
- To inform all staff of relevant and up to date CPD.
- Monitor and raise standards in Mathematics.

- Analysis of data resulting from assessment in both key stages.
- To monitor through lesson observations, informal discussions, 'drop in' sessions, learning walks and book and planning scrutiny.

Governors

There is a named governor linked to Numeracy who plays a key role in monitoring and evaluating Maths across the school through regular discussions with the subject leader.

This policy will be reviewed biannually.