

Mathematics Curriculum Statement

Maths is taught at Barrow Hall in a way that enables children to make sense of the world around them by understanding relationships, patterns and changes in quantity, space, shape and measure in everyday life.

We aim to:

Enable our children to be fluent in the fundamentals of maths, including through varied and frequent practice with increasingly complex problems, so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately and which builds on their earliest perceptual and cognitive learning through to problem solving and reasoning in real life situations.

We do this through

- promoting enjoyment and enthusiasm for learning through practical activity, exploration and discussion
- follow a model of developing concrete – pictorial – abstract representations of mathematical concepts.
- instilling confidence and competence so that children are proud of their achievements
- acquiring a thorough knowledge and understanding of numbers and the number system
- developing the ability to solve problems through decision-making and reasoning in a range of contexts
- developing a practical understanding of the ways in which information is gathered and presented
- exploring features of shape and space, and develop measuring skills in a range of contexts
- developing fluency, reasoning and problem solving skills through increasingly sophisticated problems and a variety of different representations
- Understanding the importance of mathematical skills in everyday life and across a range of subjects

Teaching and learning

We use a variety of teaching and learning styles in mathematics lessons. We do this through a daily lesson that has both whole- class and group-direct teaching. At Key Stage 2 children are taught in differentiated groups and not in their own class groups whilst in KS1 children are taught in class groups.

During these lessons we:

- encourage children to ask as well as answer mathematical questions.
- use a wide range of resources such as number lines, number squares, digit cards and other small apparatus to support their work.
- use ICT in mathematics lessons where it will enhance learning, and to assist with modelling ideas and methods.
- encourage children to use and apply their learning in everyday situations.
- provide suitable learning opportunities for **all** children by matching the challenge of the task to the ability of the child.
- Use a range of strategies to ensure appropriate activities based on prior learning.
- set regular homework tasks in order to strengthen their learning in mathematics.
- Provide daily opportunities for children to practise the four rules of number during morning activities ('4 a day')

Planning

Mathematics is a core subject in the National Curriculum 2014 and we use the White Rose Schemes of work to deliver the programmes of study in each year group. To deliver these programmes of study teachers draw from a variety of materials and programmes, including materials developed by the NCETM and those produced by White Rose. Each unit of work is planned specifically to meet the needs of all pupils and to firstly develop fluency before moving on to developing reasoning and problem solving, where children are set problems that expect them to apply their mathematical skills and understanding in real life contexts.

Planning for all units of work in each year group also reflects the school's own Calculation Policy which staff use when planning units of work and which underpin the principles outlined above.

Based on the NC programs of study and the White Rose SOW, teachers produce short term plans which define what we teach and bring the objectives to life. These plans are on display in all classrooms and monitored by the Subject Leader.

Assessment

Regular assessment is used to inform next steps in planning as well as to track and monitor pupil progress on a half termly basis based on our own 'On Track Indicators' (OTI's) and pupils achievements are judged on a 9 point scale. Teacher's use regular feedback and marking to share children's achievements and identify next steps for their learning.

Opportunities will be taken to positively promote equality and diversity.