



MATHEMATICS POLICY
September 2021
Our Mission Statement

**“To go further than we thought
To run faster than we hoped
To reach higher than we dreamed
To become the best we are able to be.”**

Helmshore Primary School aims to be an educationally inclusive school in which the teaching and learning achievement, attitude and wellbeing of every young person is our priority.

What is Mathematics?

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solutions 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.

National Curriculum 2014

Aims

Our aims in teaching Mathematics are that all children will:

- enjoy the subject and study it with confidence and a sense of achievement
- become fluent in the fundamentals of mathematics 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
- 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...
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.

School Policy and the National Framework

Principles of the Teaching and Learning of Mathematics

Mathematics is a core subject in the National Curriculum. The fundamental skills, knowledge and concepts of the subject are set out in the National Curriculum programmes of study, which are organised into distinct domains although pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should apply their mathematical skills and knowledge to other subjects across the curriculum.

Knowledge, Skills and Understanding

Teachers follow the 2014 curriculum for teaching mathematics.

In the Reception classes, teachers use the Early Years Foundation Stage framework 2014 where the knowledge, skills and understanding are covered under the heading of 'Mathematics.'

Breadth of Study

Through careful planning and preparation, we aim to ensure that throughout school pupils are given opportunities for:

- practical activities and mathematical games
- problem solving
- individual, group and whole-class discussions and activities
- open and closed tasks
- a range of methods of calculating
- utilising computer technology including iPads/tablets/apps as a mathematical tool
- learning and applying number facts

Cross-Curricular

Mathematics is taught in the form of a daily maths lesson. In addition to this, teachers actively seek to take advantage of opportunities throughout the whole curriculum to incorporate, extend and promote mathematics and mathematical problem solving. This includes using the additional Mathematics curriculum links outlined in the 2014 Lancashire Scheme of Work planning units.

Planning and Organisation

Teachers develop their maths planning in collaboration with colleagues teaching the same year group(s). This is supported by the Lancashire Maths Planning Support materials.

The approach to teaching mathematics at Helmsore Primary School is based on these key principles ~

- a mathematics lesson every day
- a focus on direct teaching and interactive oral work with the whole class and groups
- developing mental calculation strategies
- applying knowledge and skills in solving rich and sophisticated problems

Differentiation

Differentiation is incorporated into each mathematics lesson in a variety of ways ~

- using appropriate activities which offer challenge for all children

- providing open-ended tasks where differentiation is by outcome
- varying resources suited to ability
- by varying group structure
- in accordance with our equal opportunities statement (this includes provision for gifted and talented pupils and Special Educational Needs and Disabilities)

Special Educational Needs and Disability

At Helmshore Primary School we teach Mathematics to all children, at an appropriate level to provide a broad and balanced education to all children. Teachers provide learning opportunities matched to the needs of children with SEND, including children identified as being gifted and talented. Teachers ensure provision is made for children on the Pupil Premium register. Targets are set for individual children in their Individual Provision Mapping (IPMs).

Intervention group targets are set wherever appropriate.

Equal Opportunities

Children irrespective of ability, age, faith, gender, sexual orientation, race and disability are given full access to the Mathematics curriculum in accordance with current regulations. British values are promoted as set out by the Government's 2011 Prevent Strategy. These include: values of democracy, the rule of law, individual liberty, mutual respect and tolerance of those of different faiths and beliefs.

Pupils' Records of Their Work

Pupils will be involved in many practical and oral activities, some of which will be recorded. A variety of methods are taught for recording their work (including informal jottings), and pupils are encouraged and supported in selecting the most appropriate method of recording. (Also see Calculations Policy.)

All pupils are encouraged to work tidily and neatly when recording their work, in accordance with the Presentation and Marking Policy.

Marking

Marking by the teacher may include suggestions as to how improvements can be made and to celebrate achievements. Pupils can mark exercises involving routine practice with guidance from the teacher. (Also refer to the Presentation and Marking Policy.)

Assessment and Record-Keeping

Ongoing assessment of individual pupils' progress and achievement is the responsibility of the class teacher and is used to inform future planning and learning. The progress of each child is monitored and tracked through regular assessment and this is used in line with the current tracking records. Evidence is collected in class 'HAPP' (Helmshore Assessment of Pupil Progress) folders.

Regular mental maths tests are delivered throughout years 1 to 6.

Targets are set at the beginning of each half term for individuals, groups of pupils and whole class based on KLIPs (Key Learning Indicators of Performance). These are assessed by the teacher at regular intervals.

Pupils are involved in National Curriculum Assessments at the end of each Key Stage. Additional end of year testing is used with year groups 3, 4 and 5. Results are recorded on class tracking records, and the information from these results used to inform future planning.

Reporting to Parents

Bi-annual written reports are sent to parents. Details of pupils’ general progress, including SATs results where appropriate, are given. Parents are given the opportunity to discuss their child’s progress at two parents’ evenings, held in the Autumn & Spring terms and at a more informal Family Evening in the Summer term.

Computing

Information Technology, including calculators, DVDs, interactive whiteboards and computers/tablets/netbooks, is used in a variety of ways to support teaching and motivate pupils’ learning in Mathematics, where and when it is appropriate during or outside the Mathematics lesson.

Monitoring and Evaluation.

The Mathematics subject leaders contribute to the School Development Plan by outlining actions to be taken to meet targets identified as priorities for the coming year. These actions and outcomes are monitored and evaluated in various ways depending upon their nature.

Resources

Teachers keep a selection of mathematics resources within their classrooms. These include resources which are frequently used or specific to the year group. Other mathematics resources are stored centrally in the reprographics room.

Governing Body

The Mathematics Governor provides annual reports to the Governing Body, in conjunction with the mathematics subject leaders.

Homework

Homework in mathematics is set on a regular basis in the form of practical, written or oral activities. These are often related to work being covered in mathematics lessons during that week. Access to this homework is through our school’s Moodle. Alternative provision is provided for children unable to access the internet from home.

In accordance with our Homework Policy, feedback will be given in a variety of ways and may not necessarily be marked in great detail.

The governing body will review this policy in September 2022, or earlier if deemed necessary.

Signed:

Headteacher

Signed:

Chair of Governors

Date: