

Maths Policy

Hemington Primary School



Approved by:

Staff and Chair of
Governors

Date: January 2023

Last reviewed on:

Autumn 2020

Next review due by:

January 2025

Maths at Hemington Primary School

Introduction

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.

(National Curriculum 2014)

Intent

At Hemington Primary School, we view mathematics as essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment.

Our intent is that we understand that maths is a crucial skill, and all children need that skill. Our overall ambition is to enable our pupils to success in the next stage of their education and take up job roles within the STEM sector using these skills.

In line with the National Curriculum our overall intent focus on all pupils being able to;

The aims of the 2014 National Curriculum are for our pupils to:

- become fluent in the fundamentals of mathematics through varied and frequent practice with complexity increasing over time
- develop conceptual understanding and ability to recall and apply knowledge rapidly and accurately
- reason mathematically; follow a line of enquiry, conjecture relationships and generalisations
- develop an argument, justification, and proof by using mathematical language. problem solve by applying knowledge to a variety of routine and non-routine problems, breaking down problems into simpler steps and persevering in answering

Implementation

At Hemington Primary School we place great emphasis on ensuring our children spend time developing skills by providing opportunities for children to apply their learning to problem solving activities, where they are asked to answer, prove and justify their thinking.

Our whole school approach to the teaching and learning of maths involves the following;

- Our maths planning is based on Schemes of Learning from White Rose Maths (mixed year groups) and enhanced by a range of resources. This ensures a progressive and thorough curriculum in every year group. Teachers know which objectives must be taught and

assessed in each year group and can follow progressive small steps to ensure pupils have a comprehensive understanding of maths.

- Key Stage 1 and 2 carry out cold and hot tasks by using the White Rose assessments. A cold task is used at the beginning of a unit to assess what children already know. The unit of work is then taught, and a hot task of the same assessment is then given. This allows all teachers to build on prior knowledge and address any gaps and teach accordingly.
- Our Maths lessons provide the opportunity for all children, regardless of their ability, to become confident and capable learners. We are committed to building on prior learning and enabling our children to demonstrate a deep, conceptual understanding of each topic that they can develop over time.
- Our Maths lessons give all children the opportunity to develop their fluency and reasoning and problem-solving skills through using concrete materials (numicon or counters), pictorial (bar models) and then moving on to abstract ($2+1=$).
- To provide adequate time for developing key skills in fluency, reasoning and problem solving, each class teacher will provide at least five daily mathematics lessons per week. This may vary in length but will usually last for about 45 to 60 minutes.
- Tutoring is provided for all children who need additional mathematics and is given in the form of pre teaching of skills or embedding skills which are being taught in class.
- Key Stage 2 children complete a weekly key skills which develops and embeds a range of skills in maths. This enables children to develop prior knowledge, current learning and pre teaching of future topics.
- Children with additional needs are supported by using practical resources and differentiated activities where needed. Where applicable, children's provision maps will incorporate suitable objectives and teachers keep these objectives in mind when planning work.

Impact

The impact of our Maths curriculum is that at the end of Key Stage 2 our pupils achieve and make progress in line with other pupils nationally, evident through:

- Fluency in their recall of key number facts and procedures
- Accuracy in the formal calculation methods for all four operations
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics
- The confidence and resilience to reason mathematically and solve a range of problems.

Overall impact is measured by:

- In school attainment tracking

- Subject Leader monitoring (Lesson visits, scrutiny of books, pupil interviews)
- Governor monitoring

Planning

Long term planning

The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape, Space & Measure) provide the long-term planning for mathematics taught in the school.

Medium term planning

EYFS uses the EYFS framework/Early Learning Goals and year 1 – 6 use the White Rose Maths schemes of learning as their medium-term planning documents.

These schemes provide teachers with exemplification for mathematics objectives and are broken down into fluency, reasoning and problem solving, key aims of the National Curriculum.

Assessment

- 1) Informal, formative assessments are made continually by questioning the children, observing and monitoring their work. These short-term assessments are closely related to the learning objectives for the lesson and help inform next steps.
- 2) Periodic assessments take place at the end of a unit/ ½ termly – we use white rose maths end of block assessments to check progress and understanding of content covered. This information also informs interventions.
- 3) NFER assessments are conducted 3 times throughout the school year. This gives teachers the opportunity to see where each child is and plan accordingly.
- 4) Weekly Key Skills allows the Key Stage 2 teachers to see where children are on a weekly basis and to use these to plan and address any gaps.
- 5) Statutory Assessment Tests (SATs) are used for children in Year 2 and 6, plus children in Year 4 are also required to take a multiplication tables check (MTC) in the Summer Term. The purpose of the check is to determine whether pupils can fluently recall their times tables up to 12, which is essential for future success in mathematics.

Homework

Homework is set on a weekly basis by the class teacher and is at their discretion as to what is included.

Role of the Mathematics Subject Leader

- To lead in the development of mathematics throughout the school
- To monitor the planning, teaching and learning of mathematics throughout the school
- To help raise standards in mathematics
- To provide teachers with support in the teaching of mathematics
- To provide staff with CPD opportunities in relation to mathematics within the confines of the budget and the School Improvement Plan
- To monitor and maintain high quality resources
- To keep up to date with new developments in the area of mathematics
- To attend termly meetings at the Maths Hub.