

Hayes Meadow Primary School



Mathematics Policy 2023

INTRODUCTION

“Without Mathematics, there’s nothing you can do. Everything around you is mathematics. Everything around you is number.” (Shakuntala Devi – The Human Calculator)

This Maths Policy has been produced in line with the 2014 National Curriculum for Mathematics to ensure consistency and progression in teaching throughout the school. It aims to introduce children to the processes of calculation through practical, oral and mental activities. As children begin to understand the underlying ideas, they develop ways of recording to support their thinking and calculation methods, use efficient methods and learn to interpret and use signs and symbols involved. This policy shows the natural progression that a child should make in their mathematical education. Children should not progress onto the advanced stages of formal written methods until they have a secure conceptual understanding. By the end of Year 6, children should be able to choose the most appropriate and efficient approach to solve a problem: making a choice between using jottings (an extended written method), an efficient written method or a mental method.

Intent

Maths is a journey and long-term goal, achieved through exploration, clarification, practice and application over time.

Our overall aims for when children leave Hayes Meadow Primary School are:

- develop a positive attitude to mathematics
- have access to a high-quality maths curriculum that is both challenging and enjoyable, and builds upon previous learning.
- be provided with a variety of mathematical opportunities, which will enable them to make the connections across the curriculum.
- ensure children are confident mathematicians who are not afraid to take risks.
- develop an ability to express themselves fluently, to talk about the subject with assurance, using correct mathematical language and vocabulary.
- develop mathematical skills and knowledge and recall of basic facts and the four operations
- be able to use this knowledge and understanding to carry out calculations mentally
- make use of diagrams and informal notes to help record steps and part answers when using mental methods that generate more information than can be kept in their heads
- have an efficient, reliable, compact written method of calculation for each operation that children can apply with confidence when undertaking calculations that they cannot carry out mentally. They will do this by always asking themselves: Can I do this in my head? Can I do this in my head using drawings or jottings? Do I need to use a pencil and paper procedure or a formal written method?

Implementation

A ‘mastery’ approach has been adapted and implemented at Hayes Meadow Primary School for the planning, delivery and engagement with mathematics.

Each year group follows the objectives outlined in the National Curriculum. The White Rose Maths scheme is used to support teachers in planning and delivering lessons that meet the year group objectives within the National Curriculum and to ensure that all content is covered by the end of the academic year. Lessons are taught with a balance between whole class work, group teaching, practical tasks and individual practice to encourage mathematical talk, support and independence.

Within White Rose Maths, children are exposed to elements of fluency, reasoning and problem solving as the lessons are designed around these three mathematical elements. Regardless of ability, all children will have access to fluency, reasoning and problem solving to keep up, not catch up. In addition, children will have opportunities to show greater depth of understanding where challenge is needed.

In EYFS, the `Statutory Framework for the Early Years Foundation Stage` and the non-statutory guidance of `Development Matters` provides the long-term planning. To further support teachers, they have access to the White Rose Maths Early Years resources to support them with their lesson planning and provision available.

In Reception, Year 1 and Year 2, the Mastering Number program is taught daily. This aims to secure firm foundations in the development of good number sense, so children will leave KS1 being fluent and confident in number facts.

Within the EYFS and KS1, children have access to Numbots to practise and learn their number facts. Within Year 2, children will begin to transition from using Numbots and moving onto focusing on multiplication and division facts on Times Table Rockstars.

Both Numbots and Times Table Rockstars can be accessed both at school and at home.

When planning for objective coverage, teachers are expected to take the following mastery strategies into account:

- Small steps progression
- Implementing the Concrete, Pictorial and Abstract (CPA) approach to introducing, exploring and applying mathematical concepts
- Ensuring all children have access to fluency, reasoning and problem-solving activities.
- Applying/using the Bar Model approach as a strategy to approach calculation/problems where applicable
- Considering key questions and mathematical vocabulary
- Modelling of all skills and approaches
- Modelling and sharing of efficient and accurate application of methods
- Opportunities to explore maths concepts/objectives at `greater depth` for those children needing extra challenges.
- Include all learners, providing relevant scaffolding for those with additional needs (educational, medical or otherwise) through the use of concrete resources and adult support.

Units of work will be assessed upon the completion of each one, with teachers to use those published by WRM. NTS tests will also be used three times a year – towards the end of each term. Year 2 and Year 6 will also undertake the SATs tests in May/June each year.

Impact

Pupils will leave us prepared for the next stage in their lives with:

- Quick recall of facts and procedures
- The flexibility and fluidity to move between different contexts and representations of mathematics
- The ability to recognise relationships and make connections in mathematics
- Confidence and belief that they can achieve
- The knowledge that maths underpins most of our daily lives
- Skills and concepts that have been mastered
- Have a positive and inquisitive attitude to mathematics

Health and Safety and Safeguarding

Children learn best when they are healthy, safe and secure, when their individual needs are met, and when they have positive relationships with the adults caring for them. We follow the safeguarding and welfare requirements detailed in the 'Keeping Children Safe in Education' statutory guidance and adhere to our separate safeguarding policy.

The DSL is Mrs Sivieri. The DDSLs are Mrs Morgan, Mrs Gilbert and Mrs Laird.

Inclusion

We value all our children as individuals at Hayes Meadow irrespective of their ethnicity, culture, religion, home language, background, ability or gender. We plan a maths curriculum that meets the needs of the individual child and support them at their own pace so that most of our children achieve and even strive to exceed their End of Year Expectations. We strongly believe that early identification of children with additional needs is crucial in enabling us to give the child the support that they need and in doing so, work closely with parents and outside agencies. Any Individual Learning Plans (ILPs) will be followed when planning for the needs of children. See our separate policies on SEND.

Empowering Learning

As a school we have introduced our six Learning Behaviours through characters to the children. All of our children will be encouraged to recognise when they are being; Team Workers, Reflective Learners, Effective Participators, Self Managers, Resourceful Thinkers, Independent Enquirers. The six areas of empowering learning can be seen as the 'Learn to Learn' skills.

Behaviour

School expectations of behaviour are consistent throughout the different learning areas and pupils are aware of these. Please see our separate behaviour policy.

Assessment

We will track pupils' progress using a combination of formative and summative assessment linked directly to our curriculum.

Our pupils will sit the following formal assessments three times a year: NTS maths

The Multiplication tables check in Year 4

National Curriculum tests in the summer terms at the end of KS1 and 2

We will provide regular targets/next steps for pupils using accurate teacher judgements, and provide termly verbal reports against these at parents' evenings. Pupils will receive a written report annually.

Monitoring

We monitor and evaluate the impact of the teaching and learning of Maths in our school to make sure that all of our pupils make the best possible progress from their starting points. We do this through:

- Conducting learning walks
- Reviewing marking and feedback
- Termly pupil progress meetings
- Pupil voice
- Planning scrutinies
- Book scrutinies

Review Date: December 2023