

Stockham Primary School Mathematics

Policy October 2023

INTRODUCTION

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 Stockham 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.

Implementation

A 'mastery' approach has been adapted and implemented at Stockham 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 and the Mastering Number Programme to support them with their lesson planning and provision available.

In Foundation, Year 1 and Year 2, the KS1 Mastering Number program is taught four days a week. 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.

In Key Stage 2 all classes use the Fluent in Five to practice daily arithmetic. Fluent in Five provides a daily set of arithmetic practice for Years 3-6, designed to help children develop and maintain fluency in both written and mental calculations. The structure of Fluent in Five is also designed to help Key Stage 2 children distinguish between written and mental calculations.

In Years 4 and 5 the KS2 Mastering Number programme is taught. This aims to enable pupils in Years 4 and 5 to develop fluency in multiplication and division facts, and a confidence and flexibility with number that exemplifies good number sense. In Years 3 and 6 times tables are taught following the White Rose and using sound patterns and the NCETM practice booklets.

Key Stages 1 and 2 will use the Ready to Progress Criteria to target areas that children need to make the most progress.

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. The NCETM mastery assessment materials will be used to support assessment and these will be evidence as POP tasks.

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

Inclusion

We value all our children as individuals at Stockham Primary School 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. 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.

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 end of unit tests and 3 end of term tests.

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: October 2025

