South Hill Primary School – Mathematics Overview

School vision

All pupils at South Hill flourish through a nurturing environment, which builds confidence and resilience and a lifelong love of learning

Mathematics vision

At South Hill, we aim for children to develop their mathematics through fluency, application and mastery; encouraging children to be confident mathematicians and be able to problem solve using skills to equip them for the future.

Intent

At South Hill, we follow the National Curriculum for Mathematics and use Herts for Learning 'Essentials Maths'.

Our intent is to deliver a Mathematics curriculum that:

- Enables children to be fluent in key skills and have facts at their fingertips
- Fosters an environment in which children feel comfortable and confident in taking part in maths and where it is safe to make mistakes through engaging and creative lessons
- Develops resilience and perseverance for mathematicians when tackling mathematical challenges
- Enables children to make connections through mathematical concepts

The sequence for our Mathematics topics, showing our progression of skills and knowledge throughout the school are mapped out in our:

- Mathematics action plan
- Mathematics Calculation policy
- Mathematics Subject policy
- Mathematics (Essentials) long term plan

Through our teaching of Mathematics, we want all of our children to develop a mastery of the following skills:

- Fluency in fundamental skills in mathematics
- Reasoning by following a line of enquiry, making generalisations, justifying and proving using mathematical language
- Problem solving by applying their mathematics to a variety of problems with increasing sophistication

Implementation

Early Years

In line with the new EYFS framework, we follow the Herts for Learning Reception Essential Maths Scheme. We understand the importance of early experiences of Maths and we place a significant emphasis on developing a strong foundation in number.

Key Stage 1 and Key Stage 2

In line with the National Curriculum, we follow the Herts for Learning Essential Maths Scheme. The sequences are written in which learning is built upon step by step, sequence by sequence and year on year. Each sequence of learning involves 'steps' which have been closely matched to create a shared progression through the key concepts. Throughout each Maths lesson the pupils are provided with:

- Fluency, Reasoning and Problem Solving: Each lesson includes the opportunity to develop fluency skills, reason using relevant knowledge alongside the relevant terminology and solve increasingly complex problems in a systematic and coherent way
- Mathematical Vocabulary: Lessons include explicit reference to vital mathematical language, and we use speaking frames to support and encourage all children to communicate their ideas with mathematical precision and clarity
- Ongoing opportunities to consolidate key ideas and work at greater depth: When pupils are provided with greater depth challenges, they are within the context of their age-related curriculum, rather than accelerating through content for the year group above

Teaching and learning sequence for Mathematics

Inspire/ Cultural capital

- inspiration lessons to immerse the children in a new concept or to end a topic and to promote a love of learning and love of Mathematics itself.

Fieldwork and Enquiry

- Encourage the pupils to be curious, critical thinkers through open ended tasks and questions
- To encourage maths in the outdoors using the outdoor environment to teach and learn about maths.

Clear learning journey

- A clear learning journey(Essentials), from EYFS to Year 6, where skills and knowledge are built upon continually
- Revisit learning regularly to ensure children can make links between different topics covered and so they can commit this to their long term memory

Application

- Mastery curriculum where pupils deepen and develop their understanding
- Pupils acquire skills and knowledge to understand, present, analyse and communicate a range of information

In every lesson, teachers will:

- Ensure lessons are accessible for all pupils
- Promote British values
- Use regular 'Assessment for learning'
- Make use of the CPA approach
- Teach fluency
- Create a rich vocabulary environment

Impact

Pupils will be assessed by teacher's reviewing skills and knowledge taught from the NC. This will be recorded termly.

Pupils' knowledge and skills will develop progressively as they move through the school, not only to enable them to meet the requirements of the NC but to prepare them to become competent mathematicians throughout their lives.

At the end of KS1, children will sit statutory KS1 SATs.
At the end of Year 4, children will sit a national statutory multiplication test (MTC).
At the end of KS2, pupils will participate in taking SATs.

The impact of the Mathematics curriculum will be evidenced through continuous and effective monitoring by the subject leader and SLT, through:

- Action plan
- Learning walks
- Pupil voice
- Staff voice
- Parent voice
- Lesson studies
- Book scrutiny
- Staff CPD
- Effective planning