Maths at Southover School

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Intent

At Southover, we believe that maths is an integral part of the curriculum and provides children with skills that they will require for life. We aim for children to make connections between their mathematical learning in school and the applications for it in their everyday lives. Mathematical knowledge, skills and fluency are at the core of maths teaching at Southover. By using the Mastery approach, we intend that all children will have the opportunity to develop a secure understanding of mathematical concepts, which they will be able to adapt to use in a range of situations and utilise for problem solving. We have high expectations of all our children and we believe that every child should feel confident and successful in their mathematical knowledge.

At Southover School, we deliver a curriculum that will:

- Give children the opportunity to build on their skills each year and to make good progress throughout their primary education
- Engage and inspire our students through interesting, practical and challenging lessons, where they can apply their knowledge in a range of situations and understand how maths is used to problem solve in real life
- Provide children with the key foundations of mathematical knowledge, so that they can be independent and resilient learners
- Use resources to scaffold learners and provide challenge so that every child makes progress
- Encourage children to have a try and create an environment where we learn from our mistakes

Implementation

At Southover, we use the White Rose Scheme of Work to ensure complete coverage of the National Curriculum and the Early Years Foundation Stage (EYFS) statutory framework. By using the White Rose long and medium-term plans, we ensure that our pupils have a clear, progressive mathematical education from EYFS to year 6. By breaking each aspect into small steps, children can be taught the foundations that they need to understand each concept.

Teachers have an excellent knowledge of every child's progress through daily formative assessment, which they use to identify misconceptions and to develop their planning. Stem sentences are used to help students to understand and use mathematical vocabulary.

We intend for our pupils to move through the curriculum at the same pace, but we also ensure that students who would benefit from additional scaffolding and differentiation are provided with support in class and through interventions. Additionally, children are encouraged to challenge themselves to further deepen their understanding of concepts by applying their knowledge through problem solving and reasoning. When necessary, teachers will adapt lessons to suit their cohort or spend longer on a specific area to ensure

that it has been fully mastered before moving on. Our mixed year planning ensures that children have opportunities to revise previously taught concepts and to progress onto new learning.

We compliment the White Rose Scheme of Work with Times Tables Rockstars to develop fluency in times tables and to support children to achieve the Multiplication Tables Check (MTC). We also use Fluent 5 (Vocabulary Ninja), Quick 10 (Grammarsaurus), Flashback Four (White Rose) and online games to promote fluency across our school. Songs and rhymes are used frequently to help children to recall number patterns, times tables, shapes and mathematical language. RM Easi Maths is an intervention tool which helps individuals to develop their fluency.

Maths is recorded in a variety of methods. The White Rose workbooks and questions, provide excellent opportunities for reasoning and problem solving. Concrete resources and photographic evidence demonstrate that children understand how to use manipulatives to represent numbers and concepts. Part-part-whole models and bar models are used to solve calculations and children are provided with a variety of depictions of mathematical questions to solve. There is an emphasis on reasoning, with children being asked to explain their answers verbally or in writing. Concrete and pictorial resources are used in all year groups.

Children are encouraged to reflect back on their learning and to self-mark and self-assess. Teachers may either live mark, offer verbal feedback or choose to leave comments in children's books (in upper years).

Impact

By the end of their primary education, we hope that Southover pupils will have developed a range of mathematical skills which they can apply to real life situations and use to successfully transition into secondary school.

Children at Southover will be keen mathematicians and will have had many positive experiences, including our fantastic biennial STEM week.

Our pupils will be resilient, independent and adept at problem solving. We hope that Southover pupils will be curious and logical thinkers. They will have developed the ability to justify, reason and explain their answers and to apply their skills and knowledge in a variety of different situations, both real and abstract.

Students at Southover will have developed a love for mathematics and feel successful.