

MATHS: Intent, Implementation, Impact

Intent

At North Clifton Primary School, we believe an ambitious and rich mathematics curriculum is an important part of children's development throughout school, right from an early age.

We intend on delivering a curriculum which:

- Allows children to become fluent in the fundamentals of mathematics through creative and engaging lessons that give them a range of opportunities to explore mathematics.
- Develops conceptual understanding and the ability to recall and apply knowledge fluently and rapidly.
- Gives children opportunities to reason and problem solve by applying mathematics to a variety of increasingly complex challenges in Maths and across the curriculum.
- Ensures children believe in themselves as mathematicians, and develop resilience and perseverance that enables all children to reason and problem solve with increased confidence.
- Builds upon children's knowledge and understanding from Early Years to Year 1 and from Year 1 to Year 6, and is in line with the Early Years curriculum and National Curriculum.

Implementation

Our approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Year 6.

- In school, we follow the National Curriculum and use the White Rose Schemes of Work as a guide to support teachers with their planning. This creates continuity and progression in the teaching of mathematics.
- The White Rose calculation policy is used within school to ensure a consistent approach to teaching the four operations over time.
- Daily maths lessons include fluency, reasoning and problem solving.
- Concrete manipulatives and pictorial representations are used to support conceptual understanding and to make links across topics.
- Children are taught through targeted differentiated mixed ability groups.
- Key vocabulary is introduced and revisited regularly to develop language acquisition.
- Children who have shown understanding at a deep level are given challenges with deeper knowledge questions or activities to develop their skills further.

- Children with additional needs are included in mixed ability groups and teachers provide scaffolding and relevant support as necessary.
- Children have access to Times Tables Rock Stars both in and out of school to practise core Times Table skills.
- Formative assessment occurs within every lesson to help identify the children who need more support to achieve the intended outcome and those who are ready for greater challenges.
- Summative assessments are completed each term, to inform the gaps in learning which can be filled in subsequent lessons and the end of block assessments from the White Rose scheme are used at the end of each block.

Impact

A mathematical concept or skill has been mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

Our approach to Maths, children will have:

- Quick recall of facts and procedures.
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to reason and problem solve in different areas of mathematics.
- The ability to recognise relationships and make connections in mathematics.
- Resilience in the face of new challenges and concepts.

Standards will be monitored by the subject lead through:

- Learning discussions with both children and staff.
- Scrutiny of books and outcomes.
- Analysis of termly Teacher Assessments and test results.
- Consideration of weekly test results in Times table tests and Mental Maths tests.
- Analysis of KS2 SAT results.

This information will be used to evaluate the effectiveness of subject plans and subject practice. The impact on whole school learning and teaching will be used to inform the school improvement plan.