Clore Shalom School

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School Policy for:

Maths

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Monitoring: Headteacher

Headteacher's signature:

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Chair of Governor's signature

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Introduction:

This Mathematics Policy outlines the approach and strategies adopted by our school, aligning with the White Rose Maths Scheme of Work. The aim is to provide a clear framework for the teaching and learning of mathematics, ensuring consistency, progression, and a deep understanding of mathematical concepts.

Intent:

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. At Clore Shalom we deliver a curriculum that follows the White Rose Maths Scheme of Work, fostering a mastery approach to mathematics. We aim to develop a deep understanding of mathematical concepts through the Concrete-Pictorial-Abstract (CPA) approach, ensuring a strong foundation for future learning.

By the end of Year 6 our children will have developed:

Resilience and independence by becoming fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time (including breaking down problems into a series of simpler steps and persevering in seeking solutions), so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

Self-advocacy by reasoning mathematically, following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.

A lifelong love of learning through receiving a high-quality mathematics education which provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Tolerance and respect by developing their mathematical vocabulary and presenting a mathematical justification, argument or proof. Respecting other children's views which may differ from their own (e.g., the best way/most efficient way to solve a problem).

Responsible citizenship by recognising that mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment.

Teaching and Learning:

At Clore Shalom we implement the White Rose Maths Scheme of Work to provide a structured and coherent learning journey for each year group. It is a mastery approach. This is a research-driven teaching and learning method that meets the goals of the National Curriculum.

Our scheme of work puts numbers first: Our scheme has number at its heart, because we believe confidence with numbers is the first step to competency in the curriculum as a whole.

It puts depth before breadth: we reinforce knowledge repeatedly.

It encourages collaboration: children can progress through the scheme as a group, supporting each other as they learn.

Our Scheme focuses on fluency, reasoning and problem solving: it gives children the skills they need to become competent mathematicians.

We utilize the Concrete-Pictorial-Abstract (CPA) approach in teaching, enabling students to grasp mathematical concepts at a deeper level. Our mastery approach uses a carefully sequenced, structured approach to introduce and reinforce mathematical vocabulary. Pupils explain the mathematics in full sentences. They should be able to say not just what the answer is, but how they know it is right. This is key to building mathematical language and reasoning skills.

We differentiate lessons to cater to the diverse needs of learners, providing support and challenge where necessary.

In Reception we've taken the "small steps" approach to learning that is a feature of the White Rose scheme. The Reception year is broken down into manageable blocks, and every block is divided into a series of small steps. Each step builds on the last. It all adds up to a comprehensive early maths education for children right at the start of their school journey. The schemes cover the statutory framework for the national curriculum EYFS programme of study and aligns with non-statutory guidance. Reception age children are supported to explore counting, money, shape, patterns, objects, position, sequence and other core foundations of numeracy development. Each small step links to relevant rhymes and books to encourage cross-curricular learning

In Years 1 and 2 we also use Fluency Bee. Fluency Bee is a structured teaching programme designed to give children confidence with numbers through varied and frequent practice. We teach this for 15 minutes three times a week. Its aim is to build number sense and develop a range of core skills in maths. Fluency Bee brings maths to life. Key representations are used throughout the programme to help children build visual images, and there's lots of emphasis on mathematical talk, games and a hands-on, practical approach.

Children in Year groups 1-6 have five maths lessons per week. We use the White Rose Education schemes, lesson-by-lesson overviews throughout the school, and the printed workbooks. We organise these workbooks into Autumn, Spring and Summer folders.

Assessment:

We regularly assess students' progress through formative and summative assessments, adapting teaching strategies accordingly and providing targeted teaching where we feel there are gaps in learning. Children self-assess through reflections. We have three data entry points onto Arbor during the academic year.

Resources and Manipulatives:

There is a range of resources to support the teaching of mathematics across the school. All classrooms have a range of appropriate manipulatives aligned with the White Rose Maths Scheme of Work. Children are encouraged to use these to support their understanding.

We promote the use of manipulatives to enhance conceptual understanding, especially during the Concrete phase of learning.

Professional Development:

We provide continuous professional development opportunities for staff to deepen their understanding of the White Rose Maths Scheme of Work and effective teaching strategies. Insets and HFL advisors provide an opportunity for this.

Teachers collaborate to share best practices, resources, and experiences related to the implementation of the scheme.

Monitoring and Evaluation:

We regularly monitor and review the effectiveness of the mathematics curriculum, making adjustments as necessary to meet the needs of our learners.

We use assessment data to identify areas for improvement and provide targeted support for individual students or groups.

Communication with Parents:

We keep parents informed about the mathematics curriculum, teaching strategies, and how they can support their children's learning at home. During our curriculum evenings in the Autumn term we give examples of teaching methods that parents can use with their children.

We provide updates on students' progress in mathematics during parents evening and through our school reports, celebrating achievements and addressing any concerns promptly.

Review:

This Mathematics Policy will be reviewed annually, ensuring its continued alignment with the White Rose Maths Scheme of Work, Version Three, and the evolving needs of our learners and staff.