Teaching Maths at Steeple Claydon School

Intent

The intent of our mathematics curriculum is to provide a structured sequence of learning which is accessible to all and will maximise the development of every child's ability and academic achievement. We deliver lessons that are creative and engaging. We want children to make *rich connections* across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. We intend for our pupils to be able to apply their mathematical knowledge to science and other subjects. We want children to know that maths is *purposeful learning* as it is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. As our pupils progress, we intend for them to be able to understand the world, have the ability to reason mathematically, have an appreciation of the beauty and power of mathematics, and a sense of enjoyment and *curiosity* about the subject. The collaboration between peers, and the relationship between learners and their class teacher, should drive the learning and inform the content, strategies and real-world contextualisation to maximise on the progress and learning opportunities. We aim for our pupils to have the *self-esteem* to take risks and *relish challenges* in mathematics

Curriculum

At Steeple Claydon School we follow the White Rose Maths scheme of learning, which fully aligns to the 2014 National Curriculum for mathematics. The White Rose Maths Primary Scheme of Learning begins in EYFS and is progressive in skills and knowledge through to Year 6.

Teaching Maths for Mastery

The whole class works through the programme of study at the same pace with ample time on each topic before moving on. Ideas are revisited at higher levels as the curriculum spirals through the years. In some cases, it will be appropriate for teachers to adapt the curriculum to support children with SEND.

Differentiated Activities

Tasks and activities are designed to be easy for pupils to enter while still containing challenging components. In addition to the White Rose Maths resources, we use mastery and greater depth tasks in order to further challenge pupils. We label tasks as 'Hard', 'Harder', 'Hardest' and 'Herculean' and encourage children to choose the task they start on to develop independence, *self-expression* and challenge for all. Within maths lessons and beyond, pupils are recognised for their *individual strengths* which are celebrated and nurtured (house points, stickers, certificates etc)

Problem Solving

Lessons and activities are designed to be taught using problem-solving approaches to encourage pupils' higher-level thinking. The focus is on working with pupils' core competencies, building on what they know to develop their relational understanding.

Concrete Pictorial Abstract (CPA) Approach

Our pupils learn new concepts initially using concrete examples (counters, base 10, Cuisenaire etc) then progress to drawing pictorial representations before finally using more abstract symbols and calculations.

Calculation Policy

Our calculation policy is based on the White Rose Maths calculation policy and has been adapted to suit the needs of the children in our school. Each of the 4 operations are taught to children following the concrete, pictorial, abstract approach.

Variation
The questions and examples are carefully varied to encourage pupils to think about the maths. Rather than provide mechanical repetition, the examples are designed to deepen pupils' understanding and reveal misconceptions. This might be through conceptual variation or procedural variation.

Additional Mental Maths Teaching
From Reception class to 6, the children also have a separate daily mental maths lesson. This includes teaching of number bonds, times tables and mental calculation strategies.

EYFS
In EYFS we follow Development Matters 2021. Alongside this, in Reception we use White Rose Reception Scheme of Learning which is closely aligned to the specific areas of 'Numbers' and 'Shape, Space and Measure' of Development Matters.