Oldbury Park Primary Maths Rationale

Intent

At Oldbury Park Primary School, our aim is to equip children with the mathematical conceptual knowledge and understanding to enable them to develop into confident and resilient mathematicians with a strong sense of number. We believe that all of our children can succeed in Maths and we want them, and our families, to have a positive attitude towards the subject. Through Maths, our children learn to reason, express, question and challenge to ultimately understand that every problem can have at least one solution. Mathematics is a fundamental life-long skill and through a carefully planned and progressive curriculum, with endless opportunities for reasoning and application, we can support our children to succeed in the world beyond school.

Implementation

In the Early Years Foundation Stage, learning, both planned and child initiated, provides our youngest mathematicians with the small steps required in Number to reach their Mathematics Early Learning Goal. Children have many opportunities to explore and experience a broad coverage of the wider concepts of Maths. From Year 1 upwards, White Rose is used as a framework for planning, to ensure consistency and progression throughout the school. The framework is structured to set out progression in the 7 areas of disciplinary knowledge of the mathematics curriculum: Number and place value, addition and subtraction, multiplication and division, fractions, measurement, geometry and statistics. All of these are interwoven with the substantive knowledge and concepts of fluency, reasoning and problem solving. This framework is designed to inform how we plan for children to improve within each session, week and unit, and build knowledge progressively year by year, assessing how well they are improving.

At the heart of our curriculum design is the CPA (concrete, pictorial, abstract) approach. Children develop a secure depth of understanding through the use of concrete resources and pictorial representations of models and images, which then enables them to understand the abstract concepts.

Oracy is fundamental to our maths curriculum with opportunities for reasoning and 'thinking and talking like a mathematician', embedded into the learning sequences.

We follow our Trust Calculation Policy, developed in line with the National Curriculum, which ensures a progressive introduction to age-appropriate strategies for calculating. At Oldbury Park, we believe in securing firm foundations in the development of good number sense for all children. To support this, the children in Reception, Year 1 and Year 2 follow the NCETM Mastering Number Programme with the aim that they will leave Key Stage 1 with fluency in calculation and a confidence and flexibility with number. We also believe in providing children with regular opportunities to develop mathematical fluency and in turn, confidence, through our daily calculation challenge in Key Stage two. This supports children to know more and remember more.

Times tables are taught progressively with the expectation that each child will be fluent by the end of Year 4 when they will take part in national testing.

Regular and ongoing formative assessment is undertaken by teachers in the classroom in order to address misconceptions and misunderstandings. Teacher knowledge of individual pupils is supported by PiXL assessments throughout the year. In this way, teachers are able to identify gaps in knowledge and take appropriate and timely steps to bridge these gaps, as well as providing subject and senior leaders with an insight into school performance against national trends.

Inclusion

At Oldbury Park, Maths sessions are designed to be accessible for children of all abilities and backgrounds. Adaptations will be made to the curriculum, allowing all pupils with SEND to access the learning to the best of their ability. This also includes children who are academically more able. Provision is also made for children with EAL. This provision is monitored closely by the Maths leader in accordance with the SENCO, and SLT.