



Intent

Calculate and Reason like a Mathematician

The Maths curriculum at St Aloysius' offers a broad and engaging curriculum with God at the centre, reflecting on prior knowledge and putting learning in the context of extending their own knowledge and growing closer to God.

Key knowledge and skills objectives are structured from Early Years to Year 6 with a focus on building upon prior knowledge and developing our pupils to 'calculate and reason like a mathematician'.

At St Aloysius we use a mastery approach to maths teaching. This approach prioritises fluency in number, puts depth before breadth (reinforcing knowledge again and again) and focusses on reasoning and problem solving. Mastery teaching gives the children the skills they need to become competent mathematicians.

Implementation

Teachers use resources from the White Rose Mastery Scheme to guide their long-term planning, this is a government approved, research-based teaching scheme which helps pupils with problem solving and number fluency by nurturing confidence in mathematical thinking. These documents outline the weekly key questions and vocabulary as well as small steps for learning.

The Maths subject leader has also created fluency skills progression maps for each year group and teachers use these to ensure that skills and knowledge are revisited regularly.

Teachers plan creative and engaging lessons which focus on using a concrete, pictorial, abstract (CPA) approach, allowing children to use physical resources to deepen their understanding before moving on to abstract concepts. Key vocabulary is displayed in the classroom and referred to in lessons.

Where possible, teachers plan to provide real-life experiences for pupils. Key vocabulary and knowledge is regularly revisited through 'retrieval and practise tasks' (guided by the fluency skills progression map) and at the beginning of subsequent lessons.

Impact

Teachers use their formative assessment throughout the unit to give a judgement of 'working towards', 'expected' or 'greater depth' for the knowledge and skills demonstrated across the unit. Based on this assessment, At the end of each lesson future planning will be adapted for the needs of every learner.

At the end of each unit, teachers are expected to log their assessments of children's learning in SCOMIS. The Maths subject leader and senior leaders monitor the data provided as well as undertaking regular Book Looks. They also undertake Learning Walks to ensure coverage of skills and knowledge and check that the teaching is being adapted to suit the needs of all learners.