



Maths

INTENT

At St. Augustine's Primary School, we intend to provide a mathematics curriculum that caters for the needs of all individuals; enabling each pupil to reach their full potential. A 'mastery' approach has been developed and implemented for the planning, delivery and engagement with mathematics. Through the support and guidance from the National Centre of Excellence for the Teaching of Mathematics (NCETM) we deliver high-quality mathematics education that equips pupils to make rich connections across mathematical concepts, improve fluency, discuss mathematical reasoning and develop competence in solving increasingly sophisticated problems. Our curriculum follows the carefully constructed programme of study designed by White Rose Maths Hub which explores mathematical concepts progressively. Through this small step approach, children are expected to master a series of learning objectives in order to progress onto other mathematical concepts. Our curriculum enables all children to explore maths in depth, using mathematical language and sentence stems to reason and explain their workings. A wide range of high-quality resources are used and pupils are taught to show their workings in a concrete, pictorial and abstract form wherever suitable whilst being able to explain their choice of methods and develop their mathematical reasoning skills. These expectations allow children to better make sense of the world around them relating the pattern between mathematics and everyday life and also apply their mathematical knowledge to subjects such as science.

IMPLEMENTATION

At St Augustine's children begin their mathematical learning through the Maths area of learning (specifically 'Number' and 'Numerical Patterns'). As a school, we believe in the importance of following the concrete-pictorial-approach as a means to developing a solid understanding of mathematical concepts which can be applied in a variety of contexts through reasoning and problem solving challenges. Children receive a minimum of 5 hours maths tuition each week with additional sessions devoted to number proficiency and times tables. From Reception to Year 6, children follow the scheme of 'White Rose' which supports children in learning the fundamentals behind the meanings of numbers and exploring other key mathematical areas. Our maths curriculum is also supported through the implementation of resources from 'Classroom Secrets.' White Rose and Classroom Secrets use 'small steps' to break down the teaching sequence into small achievable steps. Where children require additional support, 'scaffolds' are used to support children further to ensure that they have secured the small step before moving on. For children who understand a concept quicker, challenges are used to deepen and challenge learners further within the curriculum area. Where children require additional support, same-day intervention is put in place to ensure that children are ready for the next 'small step'. Termly assessments are used as a diagnostic tool to ensure that teachers are adapting learning to meet the needs of all children and ensure that any necessary interventions are targeted specifically to meet the needs of children. Times tables play an important part in our maths learning, with children developing their fluency in rapid recall of tables up to 12 x 12 by the end of year 4. While the rapid recall of times tables is being developed, children are also learning how to apply and manipulate their understanding of this to reason and solve problems. Children from Y1 – Y6 have the opportunity to consolidate and apply their times tables knowledge through the weekly use of Times Table Rock Stars which is also set as home learning.

IMPACT

Through our mixed ability mathematics lessons, all children should develop resilience and self-confidence in applying their learning skills. 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 encourage resilience, adaptability and acceptance that struggle is often a necessary step in learning. We incorporate sustained levels of challenge through varied and high quality activities with a focus on fluency, reasoning and problem solving.