



Our Maths Curriculum

Intent

The teaching and learning of maths helps us achieve our school Mission. It impacts directly on the areas of achievement and enjoyment, helping pupils, among other things, to apply numerical skills confidently, think to solve problems, rise to a challenge and love learning. Our intent is to develop a culture of deep understanding, confidence and competence in maths – a culture that produces strong, secure learning and real progress. We believe that all pupils can succeed in mathematics. We don't believe that there are individuals who can do maths and those that can't. A positive teacher mind-set and strong subject knowledge are key to student success in mathematics. By building confidence, resilience and a passion for maths, we can show that whatever your prior experience or preconceptions, maths is an exciting adventure that everyone can enjoy, value and master!

Implementation

We use the White Rose Schemes of Learning to guide our teaching of maths from Reception to Year 6. White Rose is based on the mastery approach which is used so successfully in countries such as Singapore.

It breaks the curriculum down into small, manageable steps that all children work on in a daily lesson together. Those that need a bit more support are given additional help either in the lesson, before or afterwards. Those that need more challenge are given rich tasks and deeper problems to build a more profound understanding.

The scheme enables children to apply their knowledge of number into new concepts. For example when children look at measurement, they will also practice the four operations and fractions. This makes the maths purposeful and supports children with making links between topics and leading to a deeper understanding.

There is a distinct focus on number work. Children who have an excellent grasp of number make better mathematicians. Spending longer on mastering key topics will build a child's confidence and help secure understanding. We look to reinforce number fluency throughout the year. This is done as mental and oral starters or in additional maths time during the day.

Reasoning and problem solving are integral to the schemes and to our approach. We expect each lesson to have an element of applying knowledge and skills. It is through such activities that children see the real purpose of maths, and gain the most enjoyment and satisfaction.

Impact

Teachers use formative assessment to evaluate the learning during a lesson. They may ask questions to check understanding, or scrutinise independent work in order to identify common misconceptions or share thinking. Such assessment allows teachers the flexibility to intervene in a lesson to remind, redirect or overteach pupils as required. Regular marking of independent work allows teachers greater understanding of whether or not a concept has been grasped, and gives them the opportunity to feedback to pupils, to reinforce learning and to praise. It also allows them to reflect on the success of their own approach to delivering the lesson.

Formal termly summative assessments, supported by externally produced Cornerstones tests, allow teachers to evaluate how individuals, groups and the class as a whole are progressing compared to national expectations. They also give an excellent opportunity to see what concepts may need to be given additional time, and to adjust planning accordingly. They give the Maths Leader and the Senior Leadership the opportunity to see where strengths and weaknesses lie, where additional support needs to be focused and what training requirements there are.

The combination of all of these systems allows us to judge the impact of the maths curriculum in our school.

