



THE FEDERATION OF ST. EDMUND'S AND ST. PATRICK'S

Mathematics Curriculum Statement



Intent

Our Mathematics curriculum has been specifically tailored to meet the unique context of our schools. It is designed to be broad and balanced, providing all pupils with the opportunity to master their learning, develop their skills and deepen their knowledge whilst making sense and giving purpose as to why we learn Mathematics. At St. Patrick's and St. Edmund's, these skills are embedded within Maths lessons and developed consistently over time. We are committed to ensuring that children are able to recognise the importance of Mathematics in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics and to experience success in the subject with the ability to reason mathematically and solve every day problems. We are committed to developing children's curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics.

At St. Patrick's and St. Edmund's we believe that all pupils can achieve in mathematics. At St. Patrick's and St. Edmund's, we believe in a 'Mastery' approach where Mathematics is a journey and long-term goal achieved through exploration, clarification, practise and application over time. At each stage of learning, children should be able to demonstrate a deep, conceptual understanding of a mathematical topic and be able to build on this over time. We believe that children should be able to select which mathematical approach is most effective in different scenarios as their understanding of a mathematical topic becomes deeper.

The 2014 National Curriculum for Mathematics aims to ensure that all children:

- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

Implementation

The content and principles underpinning the 2014 Mathematics curriculum at St. Patrick's and St. Edmund's are:

- Teachers reinforce an expectation that all children are capable of achieving high standards in Mathematics.
- The large majority of children progress through the curriculum content at the same pace.
- Differentiation is achieved by emphasising deep knowledge and through individual support and intervention.
- Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.
- Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.
- Teachers use precise questioning in class to test fluency in conceptual understanding as well as fluency of facts and procedures. They assess children regularly to identify those requiring intervention so that all children keep up.

To ensure whole school consistency and progression, both schools use the DfE approved 'Power Maths' scheme in Key Stage 1. This is fully aligned with the White Rose Maths Hub scheme. New concepts are shared within the context of an initial related problem (power up) which children are able to discuss in pairs. This initial problem solving activity prompts discussion, reasoning and allows pupils to use mathematical vocabulary. In Key Stage 1, these problems are almost always presented with objects (concrete manipulatives) for children to use. Teachers use careful questions to draw out children's discussions and their reasoning. The class teacher then leads children through strategies for solving the problem. Independent work in workbooks provides the means for all children to develop their fluency further, before progressing to more complex related problems. The mathematical topics are taught in blocks, to enable the achievement of 'mastery' over time. Each lesson phase provides the means to achieve greater depth, with more able children being offered rich and sophisticated problems, as well as exploratory, investigative tasks, within the lesson as appropriate.

Teaching throughout Key Stage Two builds on the solid foundations of the previous key stage. Children are introduced to formal calculation methods in Year Three and these are developed and built on each year in line with age related expectations and the school's Calculation Policy. The frequent opportunities to reason and problem solve in real life contexts develops pupils' conceptual understanding and prepares them for the statutory end of key stage assessments. To ensure whole school consistency, progression and curriculum coverage, Key Stage 2 teachers plan in 'blocks' following the White Rose Maths Hub scheme. Teachers use a wealth of resources such as CGP, Shanghai Maths, Classroom Secrets, Testbase and Busy Ant Maths to provide suitable teaching material appropriate to the needs of the class. Timestables Rockstars is a times table programme that is used mainly across KS2 to ensure children are developing rapid recall of multiplication facts and prepares Year 4 pupils for the statutory Multiplication Tables Check. Pupils are also registered on Mathletics to enable them to consolidate work at home.

Baseline GL Assessments take place for all pupils at the start of each academic year to ascertain strengths and weaknesses for individual pupils and the cohort in general. This allows teachers to plan appropriately when they come to teach each block during the academic year. Two more assessment cycles are completed during the year and children's progress and attainment is discussed with senior leaders during pupil progress meetings. Formative assessment takes place on a daily basis and teachers adjust planning accordingly to meet the needs of their class. Attainment and outcomes in mathematics have a prominent focus throughout both schools. The teaching of mathematics is monitored frequently by leaders through lesson observations, learning walks, book scrutiny and pupil interviews.

Impact

At St. Patrick's and St. Edmund's a high-quality mathematical education aims to develop a range of reasoning and problem-solving skills that are transferable to other curriculum areas, particularly Science, Geography and Computing. We seek to have a supportive ethos and our approaches support the children in becoming competent and confident mathematicians. The structure of the mathematics curriculum at our schools ensures that all children are taught the strands expected from the 2014 National Curriculum. We aim to challenge each and every pupil to help them to achieve success in Mathematics by developing a growth mindset, resilience and a love for the subject. This ensures that we are able to maintain high standards of attainment above that of Manchester and national standard.