St Pauls CE (C) Primary School
Learning and growing together in God's love

Intent

Our curriculum, across every subject area, is shaped by our school vision which aims to enable all pupils, regardless of background, ability, additional needs to flourish and become the best they can be.

Our Maths curriculum is driven by the ambition that all children need a deep understanding of Mathematics. We understand that Mathematics underpins many aspects of everyday life, unlocking financial literacy and autonomy as well as many potential future careers. We aim, therefore, for pupils to leave St Pauls with fluency and proficiency in Maths, allowing them to access all aspects of the next stage in their career and life.

Using the National Curriculum, we have developed a clear skills and knowledge progression plan. In doing so, we ensure that Mathematical skills and knowledge are built upon year on year and sequenced effectively. In revisiting concepts through this sequential approach, pupils are able to add further depth to Mathematical schema each time they revisit a concept. This approach allows for sufficient practice for all pupils, developing fluency and automaticity and ensures that Mathematics at St Pauls is supportive yet ambitious for all.

Our Maths curriculum caters for all needs, being both challenging and enjoyable, following the mastery approach. From Early Years to Year 6, we delve deeply into the rich representations of mathematical concepts ensuring learning is deep and not shallow teaching of 'tips and tricks'. Our curriculum uses the concrete, pictorial, abstract approach as research has shown this to be effective in developing Mathematical understanding. We incorporate sustained levels of challenge through varied and high-quality activities with a focus on fluency, reasoning and problem-solving.

We provide our children with a variety of mathematical opportunities, which will enable them to make the connections needed to enjoy greater depth in learning. These connections extend throughout the curriculum and Mathematical concepts, which have already been covered in Mathematics lessons, in subjects such as Science, Design & Technology, Computing and Geography.

Therefore, at an age-appropriate level, we expect our pupils to be able to:

- Use mathematical concepts, facts and procedures appropriately, flexibly and fluently.
- Have sufficient depth of knowledge and understanding to reason and explain mathematical concepts and procedures and use them to solve a variety of problems.
- Recall key number facts e.g. number bonds and times tables, with speed and accuracy and use them to calculate and work out unknown facts.

Implementation

Our long-term overview, supported by White Rose Maths, outlines in which year groups pupils will be taught specific units of work including when they will be revisited. Arithmetic and KIRF (Key instant recall facts) overviews work in the same way; providing teachers with a clear understanding of what to teach, when. This forms the basis of our well-sequenced and progressive curriculum. This allows all staff to understand when concepts have been encountered before and when they will be revisited. Our calculation policy supports staff in understanding how concepts progress through year groups and provides examples of concrete, pictorial and abstract opportunities. Regular Maths CPD is provided to keep staff up-to-date with the latest research and training. Both 'in-house' and outsourced CPD is drawn upon. Leaders monitor the provision of Maths through learning walks, book scans and data analysis. They provide 1:1 coaching for identified staff.

We ensure that the majority of pupils will move through the curriculum at broadly the same pace. However, based on effective AfL, our teachers make decisions based on the security of each pupils' understanding and their readiness to progress to the next stage. This does not mean that we hold children back or that all children access the same questions and same activities all of the time. Pupils who grasp concepts rapidly are challenged by 'going deeper', being offered rich and more sophisticated problems before any acceleration through new content. Adaptive teaching allows appropriate levels of scaffold and challenge to ensure appropriate support for all learners. Mastery strategies such as 'Prove it; Compare; True or False' are used. This adaptive approach to learning is paramount in our mixed age classes. We ensure support and challenge within each child's year group curriculum. We have high ambitions for all children and a ceiling is not put on children's learning. Flexible grouping is adopted based on pre-assessment and in-the-moment AfL strategies.

We place strong emphasis on children articulating their understanding of Maths and resultantly vocabulary forms a vital part of our Maths curriculum. The importance of vocabulary and the deepening of pupils' learning can be seen clearly on working walls in classrooms. Owing to its importance, time is made for Maths. Children in EYFS have a daily mathematical focus based on acquiring knowledge of basic mathematical facts and concepts within the EYFS Curriculum. Mathematical concepts are also woven throughout their continuous provision. Continuous provision opportunities are deliberately planned for to consolidate concepts that pupils in EYFS have covered. This means pupils will encounter opportunities to explore Maths deeply and practically throughout their role play areas, allowing them to embed their understanding.

Children in KS1 and KS2 have a daily Maths session lasting 1 hour.

We also implement daily sessions focusing on the recall of identified key instant recall facts. These progressive, specific facts are non-negotiables that every child should know by the end of each year group. KS1 and KS2 children have daily arithmetic practice within specified arithmetic lessons. An arithmetic concept, taken from the arithmetic progression document, is taught on Monday and practiced throughout the week to develop fluency and automaticity.

If pupils are identified as not reaching age related expectations, we intervene promptly by providing extra support. This may take the form of additional pre- or post- teach sessions. The content of these sessions is determined by teacher AfL, ongoing gap analysis and our in-depth knowledge of each child.

Impact

By the end of Year 6, we expect the vast majority of our children to:

- Be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.
- Have deep conceptual understanding and the ability to recall and apply mathematical knowledge rapidly and accurately.
- Reason mathematically by following a line of enquiry, using their knowledge of relationships and generalisations, and justify using mathematical language.
- Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.
- Move onto their next stage of education and wider life with a solid understanding of Mathematical concepts, enabling them to flourish in the future.