

Vision and Aims statement for Mathematics

Mathematics has its own unique place in the curriculum at St Anne's. It provides pupils with powerful ways to describe, analyse and change the world. Pupils can experience a sense of awe and wonder as they solve a problem for the first time, discover a more elegant solution and make links between different areas of mathematics. Mathematics makes a significant contribution to modern society, Children are encouraged to recognise the significance of Maths in their daily lives. The basic skills of mathematics are vital for the life opportunities of our children, these are embedded throughout our year groups and the contribution that they make to other areas of maths is valued by all staff members and pupils. The curriculum at St. Anne's ensures that staff revisit mathematical concepts, giving children lots of opportunities to consolidate learning - repetition of key concepts is valued by all. Standards in maths at the end of Key Stage 2 are outstanding, we strive to maintain this for future cohorts, but more significant to us, is that we encourage pupils to foster a love of maths, engaging in the challenges that it provides.

Pupils at St Anne's study mathematics to become functioning adults who are able to think mathematically enabling them to reason and solve problems in a range of contexts. We want St. Anne's pupils to leave here ready for their high school mathematics, knowing that they have a very secure understanding of the Maths curriculum.

Mathematics makes a significant contribution to modern society:

- the basic skills of mathematics are vital for the life opportunities of our children;
- mathematics develops the mind and those highly valued cognitive skills.

Pupils at St Anne's study mathematics to become functioning adults who are able to think mathematically enabling them to reason, solve problems and assess risk in a range of contexts.

"Good mathematics teaching is lively, engaging and involves a carefully planned blend of approaches that direct children's learning...the pitch and pace of the work is sensitive to the rate at which children learn while ENSURING expectations are kept high and progress is made by all children"
(The Primary National Strategy)

Aims:

- to foster positive attitudes, fascination and excitement of discovery through the teaching and learning of mathematical concepts
- to develop a 'can do' attitude in our children
- to broaden children's knowledge and understanding of how mathematics is used in the wider world
- to enable our pupils to use and understand mathematical language and recognise its importance as a language for communication and thinking
- to implement the current legal requirements of the Foundation Stage (FS) and the National Curriculum (NC), through the use of the Foundation Stage curriculum Guidance and the Primary Framework for Mathematics.

In lessons we expect to see...

- Use of specific mathematical vocabulary.
- Lessons which start with useful fluency or a revision of previously taught areas of learning.
- Generally mixed ability pairings (although this is dependent on the lesson).
- Use of the concrete, pictorial, abstract approach (including manipulatives and bar models where appropriate).
- A focus on developing fluency alongside problem solving and reasoning.
- Challenge and support so that children can achieve to their full potential.
- The majority of children working on the same objective.

Intent

Implementation

Impact

- Our principal aim is that children leave St Anne's School with a wide range of happy and rich

- The curriculum hours in Mathematics are non-negotiable and will be followed by all staff in the

- Children are happy learners within mathematics. They experience a wide-ranging

<p>memories in Mathematics formed through interesting and exciting experiences driven through vehicles that enhance a child's awareness of their own abilities and strengths as a learner; thus ensuring that children see learning in mathematics as an ongoing process not a one-off event.</p> <ul style="list-style-type: none"> • Children will meet the National Curriculum expectations in mathematics, which will be taught by highly-enthusiastic qualified staff who will support children to develop concepts and inspire enthusiasm and interest in mathematics. • Children will study a high quality maths curriculum that is both challenging and enjoyable. • Children will develop into independent learners with inquisitive minds who have secure mathematical foundations and an interest in self-improvement. • Opportunities will exist for children of all ages to experience learning beyond the classroom. This will allow them to enrich their knowledge by, for example, undertaking maths investigations outdoors, applying maths skills to cross curriculum work and engaging parents in home application of skills. • Children will develop a deep understanding of the mathematics they are studying. They will increasingly use their prior knowledge to solve problems and develop the sophistication of mathematics. This will be done through teacher input as well as independently. • Children will be provided with a variety of mathematical opportunities which will enable them to make connections in learning leading to greater depth learning, ensuring they are confident mathematicians who are not afraid to take risks. • Children will develop a real understanding and appreciation of the world learning from the best that has been developed and said. • A high quality mathematics education will be taught providing a foundation for understanding the world, developing the ability to reason 	<p>school. Fixed timetables will be set before the academic year and monitored by the Senior Leadership Team of the school.</p> <ul style="list-style-type: none"> • The Subject Leader for Mathematics will meet the Senior Leadership Team to evaluate provision in order to ensure that teaching and learning in Mathematics is outstanding. Where necessary, staff will receive coaching and training in Mathematics. • Pupils will make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. • Success criteria are set in order to guide children to achieve their potential. This ensures work is demanding and matches the aims of the curriculum. • High quality teaching responds to the needs of children. Spiral learning is a key focus of all formative and summative assessment with teachers actively marking work in lessons in order to identify misconceptions early. • High quality input from experts and educational resources complement the delivery of specialist learning admirably. 	<p>number of learning challenges in the subject and know appropriate responses to them.</p> <ul style="list-style-type: none"> • Through mathematics, children deepen their appreciation of their faith and fulfil their God-given talents. • Visits within mathematics have enriched the lives of the children and they are able to discuss how the experience impacted their knowledge and understanding. • Children of all abilities and backgrounds achieve well in mathematics, reflected in outstanding progress that reveals a clear learning journey. Children talk enthusiastically about their learning in mathematics and are eager to further their learning in the next stages of their education. • There is a proven track record of test success that reflects the impact of deep learning. • Clear outcomes focus and guide all mathematical development plans and drive improvement. • Children will become fluent in the fundamentals of mathematics. Through varied and frequent practice with increasingly complex problems over time, pupils will have the conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. • Children will be able to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, developing an argument, justification or proof using mathematical language. • Children will solve problems by applying their mathematics in a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering to seek solutions. • Through wider reading in mathematics, children will have opportunities to explore key mathematic concepts that explore such topics as mathematics in nature and support learning linked to vehicles. They will explore how mathematics has provided a solution to some of history's most intriguing
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mathematically and encouraging a sense of enjoyment and curiosity about mathematics.

- Mathematical skills will be applied to other subjects including science, technology and engineering.

problems. Through this exposure, children will produce work that is influenced by the best of the best.