



## ST PETER'S CHURCH OF ENGLAND PRIMARY SCHOOL

*'In Jesus, we learn, live and grow together'*

*Be The Good Soil (Mark 4: 1-20)*

# Curriculum Intent, Implementation and Impact for Mathematics

### Mathematics Curriculum Intent

At St Peter's Church of England Primary School, we have designed our mathematics curriculum with the intent that our children will become resilient, inquisitive and focused learners. Our mathematics curriculum allows children to study and learn a wide range of mathematical strands that are essential life lessons for them. Mathematics is an important creative discipline that helps us to understand and change the world. Our curriculum allows pupils to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject with a clear understanding.

We foster and promote positive attitudes towards mathematics and encourage an enthusiastic and eager approach to learning new skills and applying them in a range of situations. From an early age, the children are encouraged to be confident mathematicians who are not afraid to take risks. Throughout each key stage, the learning will always build upon what the children have learnt previously and prepare them for future learning. As well as developing children's knowledge and understanding through daily mathematics lessons taught across the school, the children also have opportunities to develop their mathematical skills in their cross-curricular work through STEM projects, ranging from EYFS up to the most challenging tasks in Year 6. The intent is to make sure that children understand the relevance of mathematics in today's modern world and how it affects our lives.

We will deliver a curriculum that:

- Inspires creative learning through excellent teaching practices that build on prior mathematic learning and allow for repetition and progression of skills that build upon high starting points.
- Embraces the community in which it is situated, is inclusive, develops self-confidence and identifies that all our children are unique.
- Inspires pupils to see error as a learning opportunity and are resilient in their learning.
- Bases future teaching on the building blocks taught previously and uses a wide range of resources to support learning to enhance fluency, reasoning and problem solving.
- Understands the importance of pupil's development and correct use of the key words and terminology in mathematics.
- Encourages our children to be inquisitive with their learning, by encouraging opportunities that embrace the wider world.
- Is developed across the curriculum in a variety of subjects with STEM being developed and celebrated throughout the year.

## Mathematics Curriculum Implementation

- The mathematics curriculum is led and overseen by Miss K Hulse who will monitor, evaluate, review and celebrate good practice.
- The mathematics curriculum will follow the program of study put in place by the national curriculum.
- Mathematics follows a whole school approach, which will be taught daily with annual 'Maths Days' and 'STEM Days' where we look at mathematics in the wider world.
- Mathematics Lessons will build upon prior learning and develop skills year upon year.

In addition:

- The mathematics subject leader will be given training and the opportunity to keep developing their own subject knowledge, skills and understanding, so they can support curriculum development and their colleagues throughout the school.
- Assessment of mathematics will be in line with the whole school feedback policy and teachers will assess progress and attainment of mathematics.
- Opportunities given for our advanced learners to access 'Freckles' for problems that are more sophisticated.
- The outdoor area providing real life experiences involving mathematics.

Our whole curriculum is shaped by our school vision, which aims to enable all children, regardless of background, ability, additional needs, to flourish to become the very best version of themselves they can possibly be. We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. We ensure to teach secure and deep understanding of mathematical concepts through manageable steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems. The curriculum develops independent learners with inquisitive minds who have secure mathematical foundations and a deepened understanding of mathematical vocabulary that can be used correctly and with confidence.

Children are taught Mathematics daily for approximately one hour. Support is determined during each lesson to ensure secure understanding based on the needs of the child. Challenge is visible throughout the whole session, where children are asked to reason and prove their understanding at a deeper secure level - this demonstrates challenge and differentiation and will show development of skills. At the end of each strand, SIMs assessment tracker is available to support teachers in making sure children have reached the intended outcomes. In the lessons, additional resources are available to help the teacher support the progress of children's learning. For example, key words displayed on working walls, this highlights the specific language involved in the children's learning, so teachers can assess their understanding and progress through vocabulary as well. Additional tools such as 'Times Tables Rock Stars' is set up for each child to ensure children can continue their learning at home. Year 6 pupils also have the daily fifteen-minute 'Freckles' sessions, with this programme also put in place for our more able learners as an after school club.

## Mathematics Curriculum Impact

Here at St Peter's, we believe that the impact of our mathematics curriculum will enable the children to have a better understanding of the world around them and the decisions they can make impacting their future. All children will be able to use their mathematical knowledge in order to help them make sense of the world. Children will be able to articulate mathematical vocabulary within the correct context, throughout their learning. The children in each year group will also be able to move fluently between representations of mathematical ideas. Pupils will make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competency in solving increasingly sophisticated problems.

The mathematics curriculum will promote inquisitive minds, which persevere and enjoy challenge. Our curriculum enables high quality work to be produced and evidenced, highlighting a deep understanding of mathematics. This evidence will be seen through using the correct vocabulary, reasoning, problem solving and fluency, as well as cross-curricular evidence, for example STEM projects linking with science, computing and design technology. All teachers and children will see the impact by enjoying the experience of teaching and learning mathematics and understanding how it can help them in their future.

Mathematics Education at St Peter's develops pupils'...

- to become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;
- to be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios;
- reasoning mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language;
- to have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics;
- skills of enquiry and response through the use of mathematical vocabulary and questioning.

Mathematical Education at St Peter's encourages pupils to...

- consider challenging questions with a positive attitude;
- develop their vocabulary and reasoning skills by: describing, explaining, convincing, justifying or proving their finding;
- solve calculations involving the four mathematical operations and use the tools they are equipped with to solve a variety of problems;
- develop respect for and sensitivity to others, and embrace a resilient 'can do' attitude.

Mathematics at St Peter's enhances pupils'...

- effective way of building mental discipline and encourages logical reasoning and mental rigor;
- mathematical knowledge to play a crucial role in understanding the contents of other school subjects;
- ability to reflect on, consider, analyse, interpret and evaluate resilience.

Mathematic Education at St Peter's offers...

- opportunities to understand the world and provides an effective way of building mental discipline;
- opportunities for logical reasoning, critical thinking, creative thinking, abstract or spatial thinking, problem-solving ability, and even effective communication skills.