



ST. PETER'S CATHOLIC PRIMARY SCHOOL

CURRICULUM INTENT, IMPLEMENTATION AND IMPACT STATEMENT

MATHEMATICS

INTENT

At St Peter's Catholic Primary School, the intent of our Mathematics curriculum is that we develop mathematicians who are confident, enthusiastic and inquisitive. Furthermore, we want to allow children to have the opportunity to think and reason mathematically, using the appropriate vocabulary, whilst equipping them with the relevant skills, enabling them to apply their mathematical knowledge into real-life situations and see the purpose of maths in what they do. We aim to develop mathematicians who also independent and resourceful, by providing them with a range of strategies where they are able to use manipulatives and pictorial representations, enabling them to become leaders of their own learning. Moreover, by developing these skills in our children, we hope to foster mathematicians who are resilient and have a positive attitude towards their learning.

By developing a Mastery approach, it is also intended that all children, regardless of their starting point, will maximise their academic achievement and leave St.Peter's Catholic Primary School with an appreciation and passion for Maths, resulting in a lifelong positive relationship with number.

In line with the National Curriculum Objectives for Mathematics, our intent is that all pupils:

- become fluent in the fundamentals of Mathematics, including through varied and frequent practice with increasingly complex problems over time, so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- can reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

- can 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

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also be able to apply their mathematical knowledge other subjects throughout the curriculum.

IMPLEMENTATION

Our approach to the teaching of Mathematics develops children's ability to work both independently and collaboratively. Every class from EYFS to Y6 follows the White Rose scheme of learning which is based on the National Curriculum. Lessons are personalised to address the individual needs and requirements for a class but coverage is maintained. In order to further develop the children's fluency, reasoning and problem solving, we use NCETM and Nrich, which correlate to the White Rose lessons and further develops children's understanding of a concept and the links between Maths topics.

In Early Years, Mathematics involves providing children with opportunities to develop and improve their skills, especially in the two key areas of early maths as stated in the EYFS Statutory framework, which involves number and numerical patterns. All areas of the provision have mathematical activities for the children to access as well as focused maths sessions.

At St Peter's, we recognise that in order for pupils to progress to deeper and more complex problems, children need to be confident and fluent across each yearly objective.

We aim to develop children's enjoyment of maths and provide opportunities for children to build a conceptual understanding of maths before applying their knowledge to everyday problems and challenges. To enable us as practitioners to do this, our lessons follow a 4-part structure as stated below;

Starter- Children are able to develop their oral work and mental calculations. Furthermore, they are able to practise prior learning through fluency, reasoning and problem-solving activities and as well as practise the skills needed within the new learning.

New Learning- New Learning introduces the main learning for the lesson. It requires clear explanations and modelling of tasks to be completed throughout the lesson. The children will then move on further and deepen their understanding. Learning could be developed by introducing different resources or adding a problem solving element. This is a great opportunity to assess progress and understanding, and deal with any common misconceptions before pupils start independent work. Throughout this stage, partner discussions are used to develop understanding and so teachers can check pupils' understanding before moving onto the next parts of the lesson.

Independent Learning- This gives pupils the opportunity to practise their work independently, demonstrating what they have understood and learnt. Although this is an independent task, this does not mean that the children

must work alone, as they should be encouraged to discuss mathematical concepts together using the key vocabulary of the lesson.

Plenary- This is where we revisit the learning objective, linking back to learning taught and developed within the lesson. Furthermore, it is an opportunity to look at some of the reasoning and problem-solving activities, exploring the different strategies that were used to solve them.

Furthermore, teachers also use a range of tools to support children in knowing more and remembering more in maths. These include working walls, vocabulary displays and steps to success.

Through our teaching, we continuously monitor pupils' progress against expected attainment for their age, making formative assessment judgements and using these to inform our teaching. Summative assessments are completed at the end of each term; their results form discussions in termly Pupil Progress Meetings and update our summative school tracker. The main purpose of all assessment is to ensure that we are providing to appropriate support for every child.

IMPACT

We strive to equip our children with the skills to confidently make rich connections across mathematical ideas and develop their fluency, mathematical reasoning and competence in solving increasingly sophisticated, contextual problems. Furthermore, children at St Peter's understand and value the importance of Mathematics and use their mathematics skills as a key tool in helping them to learn, and as a result, know more, remember more and understand more.

Children will have a secure understanding of the key strategies, methods, and vocabulary for each key area of the curriculum and apply these to real life purposes. They will be able to show confidence and believe they can learn by applying the knowledge and skills they already have and using the different representations they have been exposed to. Moreover, children have developed an understanding of the methods and skills taught.

Through a triangulation of monitoring, there will be a clear progression of skills and vocabulary in line with the age-related expectations. Children will be able to use the vocabulary and skills they have acquired in maths and use these independently, whilst showing resilience when tackling problems. Pupils will be flexible and fluent in moving between different contexts and representations. They will have a high level of pride in the presentation of their work and have a quick recall of key mathematical facts and procedures.

Through high quality first teaching, support and effective feedback, children will achieve age-related expectations by the end of each year group and some children will have progressed further to achieve greater depth. Summative assessments take place at the end of each term and children's progress and attainment is discussed with senior leaders in pupil progress meetings. By the end of Key Stage Two, children will leave St Peter's prepared for the next step on their mathematical journey, equipped with secure, deep and adaptable understanding of maths, which they can apply in different contexts.