



ST MARY'S CATHOLIC PRIMARY SCHOOL

Mathematics Curriculum Statement



INTENT

Mathematics equips children with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways. Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind, we endeavour to ensure that children develop a healthy and enthusiastic attitude towards Mathematics that will stay with them to encourage economic wellbeing. The National Curriculum for Mathematics describes what must be taught in each key stage. St Mary's Catholic Primary School follows the Mathematical Programme of Study 2014 which provides detailed guidance for the implementation of the National Curriculum for Mathematics. This ensures continuity and progression in the teaching of Mathematics across the whole school. In the Foundation Stage, where Mathematics is defined as a specific area and divided into number and shape, space and measure, the children are engaged and challenged with age appropriate targets.

It is very important to create an agreed whole school approach of which staff, children, parents, carers, governors and other agencies have a clear understanding. This policy is the formal statement of intent for Mathematics. It reflects the essential part that Mathematics plays in the education of our pupils. It is important that a positive attitude towards Mathematics is encouraged amongst all our pupils in order to foster self-confidence and a sense of achievement. This statement relates to all pupils, staff, parents, carers and governors of St Mary's Catholic Primary School. The age range of pupils from 3 - 11 must be acknowledged in the creation of policy and the development of the Mathematics curriculum. The principles of St Mary's Catholic Primary School for Mathematics are:

- policy and provision are evaluated and reviewed regularly
- resources of time, people and equipment are planned, budgeted for and detailed when appropriate in the subject Action Plan and School Development Plan.
- cross curricular links will be integrated where appropriate.
- Use of computers and technology will be integrated where appropriate to support teaching and learning.
- planning of Mathematics ensures continuity and progression across all year groups and key stages.

IMPLEMENTATION

Although relating specifically to Mathematics our aims for the subject are also in line with the school's general aims. We aim to provide the pupils with a Mathematics curriculum, which will produce individuals who are literate, numerate, creative, independent, inquisitive, enquiring and confident. We also aim to provide a stimulating environment and adequate resources so that pupils can develop their mathematical knowledge, skills and understanding to their full potential. Our pupils should have a sense of:

- the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use what they know by heart to figure out numbers mentally
- calculate accurately and efficiently, both mentally and written
- drawing on a range of calculation strategies
- make sense of number problems, including real life problems, and recognise the operations needed to solve them
- discuss and explain their methods and reasoning using correct mathematical terms
- judge whether their answers are reasonable and have strategies for checking them
- where necessary suggest suitable units for measuring and make sensible estimates of measurements explain and make predictions from the numbers in graphs, diagrams, charts and tables
- develop spatial awareness and an understanding of the properties of 2D and 3D shapes

Pupils are provided with a variety of opportunities to develop and extend their mathematical skills in and across each phase of education. Lessons follow a mastery approach of 'Concrete', 'Pictorial' and 'Abstract' where appropriate and include a balance of fluency and reasoning at each stage of learning. Sequences of work are planned based on the needs of the children following elicitation that informs planning. The sequences of work are planned with an emphasis of mastering each area of maths with repeated practice and links between other areas of maths. This is supported by using the White Rose Hub overviews and resources. The teaching of Mathematics at St Mary's Primary School provides opportunities for: group learning, adult guided groups, paired learning, whole class teaching and individual learning.

IMPACT

At St Mary's Catholic Primary School, we recognise the importance of establishing a secure foundation in mental calculation and recall of number facts before standard written methods are introduced. When these skills have been clearly achieved, then the stages of development in written methods are implemented as defined in the school's calculation policy. We use vocabulary from the relevant year group when planning to help determine the appropriate terminology to use in our teaching. Children are expected to use this terminology in their verbal and written explanations. Mathematics contributes to many subjects and it is important children are given opportunities to apply and use Mathematics across the curriculum and in real contexts and in outdoor spaces when possible. We endeavour at all times to set tasks that have high expectations for all, are challenging, motivating and encourages pupils to talk about what they have been doing as well as responding to written questions to develop their understanding as outlined in the school's marking policy.

MATHEMATICS IN THE EARLY YEARS

At St Mary's Catholic Primary School, we provide children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces, and measure. Activities are based on practical real-life contexts to encourage inquisitive minds and develop critical thinking

Number: children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

Shape, Space and Measure: children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.