Mathematics Curriculum Intent

School Mission Statement

We come together as St. Joseph's family

To learn, share our faith and do our best to follow in the footsteps of Jesus.

Whole school Curriculum Intent

Our curriculum is inspired by the words of Oscar Romero, 'A*spire not to have more, but to be more'*. We aim to provide a Catholic Christian education, based on the life and teaching of Jesus Christ, in which the values of the Gospel underpin all aspects of school life. We will provide an environment in which the dignity of each person as a child of God is recognised and developed; and promote the full potential of each child through our curriculum which develops spiritual, academic, social and emotional growth.

In designing our curriculum, we have provided opportunities for our children which are underpinned by three curriculum drivers;

- Communication and Language
- Understanding of the World
- Independence in thought and action

We celebrate a 'knowledge-engaged' approach to learning, ensuring essential aspects of subject knowledge are learnt, alongside life-long learning skills to enable children to become resilient and independent learners for the future.

Subject Intent

At St Joseph's RC Voluntary Academy, we recognise the value that a high quality mathematics curriculum can offer to our pupils.

All pupils are entitled to a maths curriculum, enabling them to become competent and independent mathematicians. At St Joseph's we help all children develop the skills and processes necessary to use Maths as part of their everyday lives. We deliver lessons that are creative and engaging. We teach skills through context, providing purpose and meaning, making mathematical experiences enjoyable, practical, relevant and realistic. This helps children to develop a positive attitude towards Maths and develop the ability to work independently with confidence in their work.

When teaching mathematics at St Joseph's, we take a mastery approach and intend to provide a curriculum which caters for the needs of all individuals. We incorporate sustained levels of challenge through varied and high quality activities with a focus on fluency, reasoning and problem solving. Pupils are required to explore maths in depth, using mathematical vocabulary to reason and explain their workings. A wide range of mathematical resources are used and pupils are taught to show their workings in a concrete fashion, before establishing ways of pictorially and formally representing their understanding. They are taught to explain their choice of methods and develop their mathematical reasoning skills. We encourage resilience and acceptance that struggle is often a necessary step in learning. We want pupils to build a deep conceptual understanding of concepts which will enable them to apply their learning in different situations.

Through mathematical talk, children will develop the ability to articulate, discuss and explain their thinking with confidence. We will provide the children with the necessary resources to allow all children to access the curriculum and encourage them to use this where appropriate to explain their logic and reasoning.

We follow the Power Maths scheme which is supplemented further with resources from NCETM, NRich and Pinpoint, which enables us to confidently ensure that our children develop a Mastery in Mathematics. We intend for our pupils to be able to apply their mathematical knowledge to science and other subjects. Maths is a journey and the long-term goal is achieved through exploration, clarification, practice and application over time. At each stage of learning, children should be able to demonstrate a deep, conceptual understanding of the topic and be able to build on this over time.

As our pupils progress, we intend for them to be able to understand the world, have the ability to reason mathematically, have an appreciation of the beauty and power of mathematics, to think critically and creatively with a sense of enjoyment and curiosity about the subject.

National Curriculum Aims for Mathematics

The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- 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 routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.