



Science 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, '*Aspire 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 science curriculum can offer to our pupils.

All pupils are entitled to access a high quality, broad and balanced science curriculum. We recognise the importance of science in every aspect of daily life and as one of the core subjects taught in Primary Schools, we give the teaching and learning of Science the prominence it requires. Our science teaching aims to give all children an increased knowledge and understanding of our world, whilst developing specific skills associated with enquiry and thinking scientifically. We aim to evoke the natural curiosity of the child, encourage respect for living organisms and the physical environment and provide opportunities for critical evaluation of evidence through the specific disciplines of biology, chemistry and physics.

Our ambitious science curriculum aims to ensure that all pupils develop progressive, scientific enquiry skills across all key stages within the strands of Science. These are embedded in each topic the children study where subject specific vocabulary is taught and built upon. These topics are revisited and developed throughout their time at school to ensure conceptual understanding is used accurately and precisely. Our curriculum allows children to both reflect and build upon their prior knowledge which increases their enthusiasm for the topics, whilst embedding this procedural knowledge into the long-term memory. We aspire for our children to achieve their full potential and appreciate how science emulates throughout every aspect of our daily life.

All children are encouraged to develop and use a range of skills over time, including comparative and fair testing, making observations, using simple equipment and taking measurements, identifying, classifying and grouping, planning and investigating, using secondary sources as well as being encouraged to question the world around them and become independent learners.

We place strong emphasis on the importance of practical investigative opportunities to enable our children to question and become enquiry-based learners. We strongly believe that as the children progress in their science knowledge, they will also progress in their scientific enquiry skills and become experienced in planning their own, child led investigations.

Specialist science vocabulary is taught and developed through all topics and this is reinforced using knowledge organisers. Children have access to key language and meanings in order to understand and readily apply this to their written, mathematical and verbal communication in science. Our pupils are encouraged to hypothesise and collaborate, and teachers use effective questioning to develop the discussion of ideas and concepts.

Through our science curriculum, pupils will use a range of secondary resources to develop their knowledge and understanding, such as digital technology, text books, sensors and photographs. They will be able to take part in relevant educational visits, Forest School links, transfer their understanding of British Values and respond to Bishop's John's call to 'think globally, act locally' in learning about the importance of our world and how it should be treated.

National Curriculum Aims for Science

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

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.