

Curriculum Intent – Science



Intent

At Saint Veronica's we reflect the National Curriculum's belief that high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena and God's great world. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

'We use opportunities to explore and learn' – our curriculum is a purposeful and memorable experience with opportunities for all children to develop as individuals; to be confident and resilient learners by promoting high expectations and standards in Reading, Writing, Maths and all subjects.

At Saint Veronica's our vision is to give children a Science curriculum which enables them to explore and discover God's world around them, confidently, so that they have a deeper understanding of the world in which we live. This involves providing all children with exciting, practical hands on experiences that encourage curiosity and questioning.

Our aim is that these stimulating and challenging experiences help all children secure and extend their scientific knowledge and vocabulary. Whilst working scientifically all our children will develop a variety of approaches to answer relevant scientific questions. They will use and develop their scientific enquiry. These types of scientific enquiry will

include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils should seek answers to questions through collecting, analysing and presenting data.

We believe that these opportunities will ensure that our children are confident, life-long learners who will explore the world around them.

‘Never overlooking the needs of others’ – our curriculum is rooted in principles of Catholic social teaching (as per the teachings of Pope Francis); encouraging all children to have high aspirations and make positive contributions to their community and wider global society, becoming advocates for social justice.

Through the teaching of science, we encourage all our pupils to appreciate the complexity of God’s world and to delve further into the amazing properties within it. Our pupils are inspired by Pope Francis who requests that we become ‘stewards of creation’ and look after our ‘common home’. Our aim is to make children aware that as future scientists they can make a valuable contribution to improve the world we all share.

We want our science curriculum to be a sacred experience and make Christ known by providing opportunities for children to develop as independent, confident, successful learners who share their knowledge and skills to benefit the wider society.

‘Secure in the love of Jesus’ – our curriculum is child centred; providing opportunities for SMSC from which all children learn and develop a range of skills which they will need in order to succeed in life.

Our children will have many opportunities to develop their understanding of the moral, social and cultural aspects of science which in turns develops their understanding of causation, change and impact. We want them to know and understand how the British Values

such as democracy have developed, and in doing so, to contribute to a child's citizenship education.

We endeavour to provide the children with experiences which will ignite a passion to work to the best of their ability, ethically and diligently, in their future chosen careers.

'We recognise that each one of us is special' – our curriculum is respectful, all children respect themselves, each other and people of all faiths race and gender. The curriculum gives each pupil an opportunity to find their strengths and interests.

We encourage all our children to respect each other and have respect for people of all faiths, race and gender, ensuring children are well prepared for life in a rapidly changing world.

We make children aware that scientific endeavour has been contributed to by persons of all nations, genders and religious beliefs, all for the greater good (in most cases) of the human family.

We further enhance our science provision by organising visits/visitors to inspire our children. Our science ambassadors aim to raise the profile of science and help others engage. Science work is displayed in each classroom to celebrate the children's learning and show value.

'Respecting everything God had made' – our curriculum promotes stewardship. We show humility, care and respect for all living things.

We reflect on each science topic and evaluate its impact in different communities, contexts and times around the world. For example, comparing the impact of climate change and how we can contribute positively.

Our children will be successful learners with high aspirations who know how to make a positive and transformational contribution to their community and wider society.