St. Robert's Catholic Primary

Science & Technology

SCIENCE & TECHNOLOGY VISION

Science and technology is a discipline that allows us to better understand the natural and physical aspects of the world we live in. They are vital to the modern world since their developments are drivers of change in society and they impact everyone's lives economically, culturally and environmentally.

Therefore at St Robert's we view this area of learning plays a significant role in the opportunities they will encounter and the life choices they will make. As a school we view enhancing learners' knowledge and understanding of the world through the subjects of biology, chemistry, physics, computer science and technology essential for their future aspirations.

WHAT DOES SCIENCE & TECHNOLOGY LOOK LIKE AT ST.ROBERT'S

It is important never to view science and technology as simply a collection of facts and theories so at St Robert's we want pupils to experience the excitement and process of doing. Just like in the real world, they need to experience a quest for knowledge that can only be acquired through a journey of novel discovery. We will deliver this area through researching, analysing and evaluating data, through enquiries and practical activities that enhance the pupils' problem solving and resilience when finding solutions. There will be opportunities throughout the year for pupils to work collaboratively with others which will increase their creativity, perspective and innovation; plus work independently where they can be reflective, assess critically and gain the ability to self-motivate.

THE 4 PURPOSES

Through this AoLE we are able to develop the 4 Purposes in a meaningful way:

- Ambitious and Capable Learners - Science & Technology allows them to engage with scientific and technological change, live independent and fulfilling lives, contribute to society and culture;
- Ethically, Informed Citizens – Science & Technology enables them to make informed decisions about future actions;
- Healthy, Confident Individuals – Science & Technology provides them with the knowledge of their bodies and the ecosystems around them, and how technological innovations can support improvements in health and lifestyle.
- Enterprising, Creative Contributors – Science & Technology embraces challenges and to take risks, learn to develop solutions.

SCIENCE & TECHNOLOGY LEADS AND SUPPORT STAFF

Mrs E Neill
Mrs B Murphy

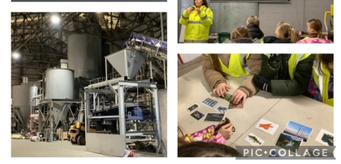
CROSS CURRICULAR LINKS

The area of science and technology provides excellent opportunities for pupils to use their cross curricular skills of literacy, numeracy and digital competency. Pupils' knowledge and use of scientific and technical vocabulary is essential in developing understanding of important ideas and concepts within this area. This area can help learners to develop use of a range of specialist vocabulary, understand the origin of these terms and use them naturally from an early age. Numeracy skills are important in deepening learners' practical understanding of scientific and technological concepts, including recognition of the mathematical foundations of the underlying disciplines. This area can help learners develop effective numeracy skills, including those to design and measure, model and communicate ideas, analyse and predict then draw conclusions. Contributions in this Area can include capturing and interrogating data, recognising and evaluating computational processes, designing and expressing learners' thinking using digital devices and systems.

Our Healthy schools initiative promotes this area through the topics of mental and emotional health and wellbeing, physical activity, healthy and sustainable food, substance use and misuse and sustainable environment.

CYNEFIN

This AoLE provides numerous links to Welsh scientist and designers, uses Welsh locality and ecosystems as an important resource and incorporating Welsh industry as notable successes of technology and innovation.



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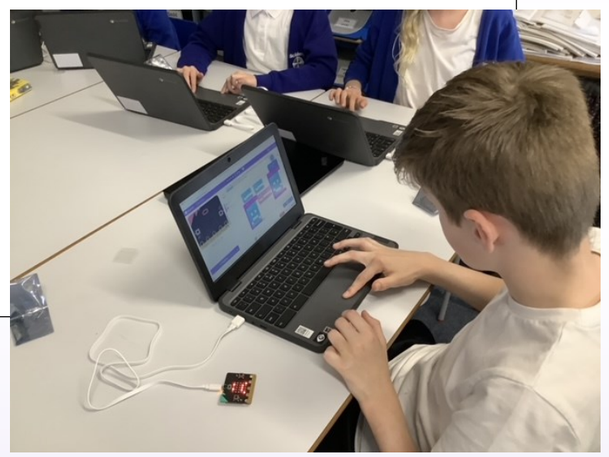
SCIENCE & TECHNOLOGY WITHIN A FAITH SCHOOL

As a faith school Science facilitates discussions that interconnect the study of the natural world, history, philosophy, and theology. Science providing the 'How' and religion explaining the 'Why'. Our RE/RSE schemes of work teach our pupils the importance of caring for the planet that God created and looking after ourselves.

SCIENCE & TECHNOLOGY

LEARNING OUTSIDE THE CLASSROOM - TRIPS, VISITS ENRICHMENT, CLUBS

Trips related to their science topic, links to local businesses and skills workshops are a fundamental support also. Our Healthy schools initiative promotes this AoLE through the topics of mental and emotional health and wellbeing, physical activity, healthy and sustainable food, substance use and misuse and sustainable environment. STEM after school clubs for both Foundation phase and Key Stage 2 are well attended, they enrich and broaden the curriculum, giving young people the chance to explore STEM subjects in less formal settings. The Computer Science element of coding is a popular club and we've used Microbits and Sphero Sprk+ for the pupils to practise their coding skills



OUTDOOR LEARNING

Outdoor learning plays an essential part of enabling pupils an experience of collecting and analysing data, and making predictions in the real world, beyond the limitations of the classroom.