

Science Curriculum- Creating curiosity at St Francis Xavier Catholic Primary School



Intent:

Colossians 1: 15-17 The Son is the image of the invisible God, the firstborn over all creation. For in him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things have been created through him and for him. He is before all things, and in him all things hold together.

At St Francis Xavier Catholic Primary School, we recognise that our pupils truly are the scientists of our future. Every child is a scientist. We impart the importance and significance of science in every aspect of daily life. As one of the core subjects taught in Primary Schools, we ensure that our pupils are inspired through science, encouraging their curiosities about our 'Common home' and beyond. We believe that every pupil should see the vocational possibilities also associated with science and that one day in their futures, they may apply their scientific knowledge and skills and seek careers in the world science.

Through the science curriculum, and enrichment opportunities, we are increasing pupils' knowledge and understanding of our world, whilst developing their skills for working scientifically to enhance their process of enquiry. We nurture and encourage the natural curiosity of our pupils, encourage respect for living organisms and the physical environment and provide opportunities for critical evaluation of evidence.

In conjunction with the aims of the National Curriculum, our Science teaching offers opportunities for children to:

- 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
- develop the essential scientific enquiry skills to deepen their scientific knowledge
- Use a range of methods to communicate their scientific information and present it in a systematic, scientific manner, including I.C.T., diagrams, graphs and charts
- Develop a respect for the materials and equipment they handle with regard to their own, and other children's safety
- Develop an enthusiasm and enjoyment of scientific learning and discovery.

The Curriculum for science at St Francis Xavier provides Substantive and disciplinary knowledge and skill development, which is linked, where possible, to the current topics, our Values and Virtues and our Catholic Social Teaching strands to provide a creative scheme of work, which reflects a balanced programme of study, rooted in the teachings of Christ.

Implementation:

- Science is taught as a core subject, from pre-school up to year 6
- Scientific knowledge and understanding are developed- and pupil led investigations are carried out, based on the foundations of a secure subject knowledge, with the skills for working scientifically intertwined through the lessons
- The skills for working scientifically are taught and developed to ensure our pupils can carry out scientific investigation and enquiry with precision and confidence
- Formative and summative assessment is used to plan, adapt and deliver a tailored science curriculum, relevant and appropriate for our individual pupils
- Enrichment activities are planned, including science week and a science fair, to ensure all pupils are inspired through science, and their God given gifts and talents are nurtured
- Pupil voice is used to further develop the Science curriculum and tailor their experiences for them
- CPD opportunities are planned to ensure our teachers are confident and skilled in delivering high quality teaching and learning opportunities in science

Statement of Impact

The successful approach at St. Francis Xavier Catholic Primary results in a fun, engaging, high-quality science education, that provides children with the foundations for understanding the world. Our engagement with the local environment ensures that children learn through varied and first-hand experiences of the world around them.

Pupils at St Francis Xavier have a progressive, knowledge-based learning journey in science, developing their knowledge and skills for working scientifically across the phases. Outcomes in books and pupil voice demonstrate pupils' pride in their science learning journey.

Through various workshops, trips and interactions with experts and local groups, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity. We ensure our Catholic Social Teaching underpins our science curriculum, with God being the divine creator of everything we have in our world.