



St. John Vianney Catholic
Primary School
Science Policy
(2019-20)



Our Vision

Through our positive caring ethos, we provide the opportunity for every child to reach their full potential. We embrace Catholic Christian values and ensure all our children are encouraged to develop a sense of curiosity and excitement about the natural world around them. Nurturing an appreciation of how the wonders of Science can help explain what happens, predict how things will behave and analyse cause and effect.

Rationale

A good understanding of scientific knowledge and conceptual understanding helps to support pupils work across the curriculum. The main aspects of science to be studied will be determined by the programmes of study within the National Curriculum 2014.

The National Curriculum 2014 states why we teach science in schools: 'A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. 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.'

We believe that a broad and balanced science education is the entitlement of all children.

Aims

To develop knowledge and understanding of important scientific ideas, processes and skills and relate these to everyday experiences.

- be curious about the things they observe, experience and explore relating to the world around them
- use their experiences to develop understanding of key scientific ideas
- use models to represent things that they cannot directly experience
- acquire and refine practical skills necessary to investigate ideas and questions safely
- develop skills of sorting, classifying, planning, predicting, questioning, inferring, concluding and evaluating through investigative activities

- make informed decisions based on evidence and their own experiences and be able to apply scientific knowledge to new situations
- practise mathematical skills (counting, ordering numbers, measuring, drawing and interpreting graphs and charts) in real contexts.

To develop effective ways of thinking, finding out about and communicating scientific ideas and information.

- think creatively about science and enjoy trying to make sense of phenomena
- develop their own ideas on how to investigate an idea or phenomenon
- develop language skills through talking about their work and presenting their ideas using writing of different kinds
- use progressively technical scientific and mathematical vocabulary and draw diagrams and charts to communicate scientific ideas
- use a range of media and secondary sources, including ICT to extract scientific information.

To explore values and attitudes through science.

- work with others, listening to their ideas and treating these with respect
- develop a respect for the environment and living things and show they understand how human activity impacts these things
- develop responsibility for their own health and safety and that of others when undertaking scientific activities.

Planning and Assessment

Class teachers refer to the Primary Curriculum 2014 (outlined in the long-term planning) for the teaching of science in Key Stage 1 and Key Stage 2. In the Foundation Stage, science activities are planned in line with the Curriculum Guidance for Early Years Foundation Stage. Two hours a week are timetabled for science, although this is flexible, and the subject can be blocked depending on the unit being covered and how it relates to the Creative Curriculum. Short term planning is annotated by the class teacher and this is used to inform next steps in learning. Children are formally assessed throughout lessons and a summative assessment is carried out at the end of each term.

Marking

Teachers will ensure that marking provides further challenge to each individual child. The marking consolidates the previous learning and aids progression by in-depth questioning relating to the lesson's objective.

Equal Opportunities

As a wholly inclusive school we are committed to providing a teaching environment conducive to learning for all. Each child is valued, respected and challenged regardless of ability, race, gender, religion, social background, culture or disability. As teachers differentiate where necessary for children with specific educational needs, all children will be able to benefit from all science lessons.

Health and Safety

In their planning of activities, teachers will anticipate and identify likely safety issues. They will also explain the reasons for safety measures and discuss any implications with the children. Children should always be encouraged to consider safety for themselves, others, the environment and the resources they use, when undertaking scientific activities.

Monitoring and review

The Science team and class teachers are responsible for monitoring the standard of the children's work and the quality of teaching in Science. The Science team is responsible for supporting colleagues in the teaching of Science, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.

This policy will be reviewed every three years or in the light of changes to requirements. This science policy will be reviewed by the science curriculum team and the senior leadership team.

Date for next review of this document will be July 2022.

