

“Love one another, as I have loved you.” John 13:34



**The Federation of Antrobus St Mark's and Great Budworth CE (A) Primary Schools**

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### **Science Policy**

#### **Overview**

'A 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. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.' National Curriculum, 2014

#### **Intent**

We live in an increasingly scientific and technological age where children need to acquire the knowledge, skills and attitudes to prepare them for life in the 21st Century. We, at Antrobus St Mark's Primary School, believe that the teaching of science develops in children an interest and curiosity about the world in which they live and fosters in them a respect for the environment. Through the framework of the National Curriculum, we aim to:

- To give children opportunities where they can widen their knowledge through an exciting and stimulating science curriculum.
- 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 write their own and answer scientific questions about the world around them
- equip pupils with the scientific knowledge required to understand the uses and implications of science, today and for the future
- To develop children's ideas and ways of working to enable them to make sense of the world in which they live through investigation, as well as using and applying process skills.

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- To ensure that all children are exposed to high quality teaching and learning experiences, which allow them to explore their outdoor environment and locality, thus developing their scientific enquiry and investigative skills.
- To immerse the children in scientific vocabulary, which aids children’s knowledge and understanding not only of the topic they are studying, but of the world around them.

### **Implementation**

In our high standards of teaching and learning in science, we implement a curriculum that is progressive throughout the whole school.

- To ensure full coverage in key stage 1 and 2 science will be taught in blocks as set out in the National Curriculum 2014.
- Planning involves teachers creating engaging lessons, often involving high-quality resources to aid understanding of conceptual knowledge.
- Through our planning, we include problem solving opportunities that allow children to apply their knowledge, and find out answers for themselves. Children are encouraged to ask their own questions and are given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom.
- Working scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children’s time at school.
- Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding.
- Teachers use precise questioning in class to test conceptual knowledge and skills, and assess pupils regularly to identify those children with gaps in learning, so that all pupils keep up.
- Teachers find opportunities to develop children’s understanding of their surroundings by accessing outdoor learning and workshops with experts.
- Children are offered a wide range of extra-curricular activities, visits, trips and visitors to complement and broaden the curriculum. Regular events, such as Science Week, allow all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve families and the wider community.
- We build upon the knowledge and skill development of the previous years. As the children’s knowledge and understanding increases, and they become more proficient.

At Antrobus St Mark’s School we teach children by key stage to ensure that all children are learning new information in the correct sequence but also have the opportunity to develop their scientific skills and thinking.

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**Health and Safety:**

Where appropriate reminders are given to children about potential hazards and care of the equipment they are using. Staff will also consider Health and Safety measures when delivering lessons.

**Impact**

The impact and measure of this is to ensure children not only acquire the appropriate age-related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and prepare them for the next stage of their education.

**Review**

Signed: ..... Chairman of Curriculum Committee

Signed: ..... Headteacher

Date: .....

Review Date: Every 3 years

Reviewed by: V Davis-Hilliard

Date: November 2023

