

St Anne's RC Primary and Nursery School Audenshaw

Science Policy

**“To help every person here to achieve his or her best in work and play.
To celebrate whatever is good and to follow in the footsteps of Jesus
by supporting and forgiving each other, for the honour and glory of God.”**

This policy outlines the guiding principles by which this school will implement Science in the National Curriculum (2014).

Introduction

St Anne's definition of Science:

Investigating and exploring the world around us through prediction, experimenting and discovery.

Rationale:

“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 key foundational knowledge and concepts can be used to explain what is occurring, predict how things will behave, and analyse causes. This foundational understanding should be consolidated through their appreciation of the specific applications of science in society and the economy.” DfE NC 2014

Aims:

“The National Curriculum for science aims to ensure that all pupils:

- 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
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.” DfE NC2014

We also aim to

- develop children's understanding of the collaborative nature of science and build their social skills to enable them to work cooperatively
- foster concern about and actively care for our environment
- prepare our children for an increasingly scientific and technological world
- provide children with enjoyable experiences of science, so that they will develop a deep and lasting interest be motivated to study science further.

Equal opportunities

A broad balanced science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability

Please see our Equal Opportunities Policy and Teaching and Learning Policy

Methodology

National Curriculum coverage:

-Children in the foundation stage are taught the science elements of the foundation stage document through the Early Years Foundation Stage curriculum: especially in “The world” element of Knowledge and understanding of the world and in the “Health and Self Care” element of Physical Development.

-Teachers in Key Stage 1 and Key Stage 2 will ensure the National Curriculum for Science 2014 is taught.

- Children will be given different ways of working scientifically (comparative/fair-tests, seeking patterns, observation / measurement over time, identifying, grouping and classifying and using secondary sources)

-In KS1, physical process will be encouraged through play based learning where appropriately linked.

Planning, continuity and progression:

- based on a “Mastery” approach so aims for deep secure learning for all.

“Mastery learning’ is a specific approach in which learning is broken down into discrete units and presented in logical order. Pupils are required to demonstrate mastery of the learning from each unit before being allowed to move on to the next with the assumption that all pupils will achieve this level of mastery if they are appropriately supported. Some may take longer and need more help, but all will get there in the end.” DfE 2014

-Staff teach science in ways that are imaginative, purposeful, well managed and engaging following the Science learning challenge curriculum.

-Children who master content quickly should be encouraged to study broader and deeper not accelerating through the content so keeping within the key stage. They should also be encouraged to carry out more independent enquiry and build up scientific investigative skills.

Health and Safety

Please refer to the Health and Safety Policy.

Marking

Please see Feedback and Marking Policy

Date for policy review: September 2018