



Science Policy

Reviewed and Updated:

February 2018

Vision and Mission

Our vision is that every single member of our community will love, learn and grow together. This is achieved by:

- Celebrating what we are good at
- Challenging ourselves and doing our very best in our work
- Loving and respecting ourselves and each other
- Knowing that we are loved for being just how God made us
- Accepting that everyone is special



Introduction

School Aims

- * To provide an exciting curriculum with learning activities that enthuse, engage and motivate children to learn and foster their curiosity, enquiring mind and enthusiasm for learning, allowing each child to achieve their full potential.
- * To provide a secure and safe environment, for children to work and play, in which they are encouraged to develop moral values and respect for others
- * To provide multicultural links representative of our children's family cultures and backgrounds.
- * To provide a learning environment that is ordered, in an atmosphere that is purposeful and where children feel safe
- * To foster strong links between home and school, recognising the importance of parental involvement in their children's learning ensuring they are valued
- * To give children an education for life, where they are able to learn how to become effective and reliable members of the wider community and foster ambition and expectation to carry through to adult life

Expectations and Standards

Children are naturally curious. Science at primary school should nurture this curiosity and allow them to ask questions and develop the skills they need to answer those questions.

Primary science helps pupils to:

- investigate problems
- learn how science works
- discover why science matters in the world.

For excellent primary science, schools need the time, expertise and resources to deliver engaging and thought-provoking science lessons.



Aims and Objectives (*National Curriculum 2014*)

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.

Aims:

- 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

Planning, Progression and Continuity

Planning will follow the National Curriculum 2014, which is divided into programmes of study.

For each of these sections, there are separate objectives for KS1 and KS2. These are divided into year groups, full coverage of the curriculum is ensured. Our curriculum planning is based on a 1-year cycle (see Appendix 1). Staff then plan medium and short term plans from the long term plan.

We plan on a 1-year cycle to ensure each year group covers the required objectives. A 1-year cycle ensures children are taught knowledge and skills that are progressive and can be built upon each year. Our long-term overview maps the science curriculum studied in each term during each key stage. In some cases, we combine science with work in other subject areas, especially Science and English. At other times we arrange for the children to carry out a scientific investigations independently. British values and multicultural links are made throughout.

Each class teacher creates a plan for each lesson, including specific learning objectives. Children of all abilities have the opportunity to develop their skills and knowledge in each unit and, through planned progression built into the scheme of work, we offer them an increasing challenge as they move up the school.

Throughout, teachers ensure English and maths skills are incorporated into science study, allowing core subjects to be built upon through a range of topics. Where appropriate ICT is used, for example: child led research, map work and photographs for analysing. Where possible teachers plan to include field work, especially so when studying the local area.



Assessment, Feedback and Marking

It is expected that work will be assessed in keeping with the school's assessment policy. We assess the children's work in science by making informal judgements as we observe the children during lessons. Assessments will be recorded on a subject and Key stage specific assessment spread sheet (see Appendix 2 exemplar). Work will be differentiated by ability where necessary and once children have completed a piece of work it will be marked according to the school marking policy. Where appropriate, children should be provided with feedback (verbal or written) which allows them to focus on the next steps in their learning. After receiving feedback children should have the opportunity to respond to it (orally or in writing as appropriate)

Inclusion

We teach science to all children, whatever their ability. Science forms part of the broad and balanced education that all children are entitled to. Through our science teaching we provide learning opportunities that match the needs of children with learning difficulties and we take into individual's needs and abilities.

Resources

We have a range of resources suited to each programme of study as well as topic books in the library. Staff utilise the Internet where possible for up to date resources from both educational sites as well as news, images etc. During the next academic year, a review of resources will be undertaken and staff will be able to request additional resources (amount linked to budget constraints).

Role of Subject Leader

The expectation of subject leaders is outlined in Subject Leader Policy.

Role of Teacher Teachers

Class teachers are responsible for the learning and progress in science for all the children in their class, as well as planning and resourcing appropriately differentiated learning opportunities.

