Science Policy

February 2018

Aims & Objectives

Our Science Policy follows The National Curriculum 2014 Science Guidelines and 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 in the future.

Purpose of Study

A high-quality Science education provides foundations for understanding the world. Science has changed our lives and is vital to the world's future prosperity. Through building 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 knowledge and concepts can be used to explain what is occurring, predict how things will behave, and analyse causes. This understanding should be consolidated through their appreciation of applications of Science in society and the economy.

In teaching Science, we are developing in our children:

• a positive attitude towards Science and an awareness of its fascination;

• an understanding of Science through a process of enquiry and investigation;

• confidence and competence in scientific knowledge, concepts and skills;

• an ability to reason, predict, think logically and to work systematically and accurately;

• an ability to communicate scientifically;

• the initiative to work both independently and in co-operation with others;

• the ability and understanding to use and apply science across the curriculum and real life.

Early Years Foundation Stage (EYFS)

We teach science in the EYFS as an integral part of the topic work covered during the year, relating the geographical aspects of the children's work to the objectives set out in the Early Learning Goals. Science makes a significant contribution to the ELG objectives of developing a child's knowledge and understanding of the world.

Mathematics Through Science

We aim to develop the delivery of the Mathematics curriculum by making explicit links to the Science curriculum. When recording a scientific investigation, it is expected the level of maths which is utilised is reflective of the age appropriate maths curriculum. This progression of skill is closely tracked during the monitoring and evaluation process.

Recording Scientific Investigation and Enquiry.

In order to embed and develop our skills-driven curriculum which is written in a bid to help pupils' get ready for the next stage in their educational career, we expect a progressive approach to scientific recording. Clear guidelines are given to each year group as to what they need to record during the process. This progression gives children greater scientific knowledge, understanding and language. Again, this is closely tracked during the monitoring and evaluation process.

Teaching Science to children with SEN

At our school we teach science to all children, whatever their ability. Science forms part of the school curriculum policy to provide a broad and balanced education to all children. We enable pupils to have access to the full range of activities involved in learning about science.

Assessment

This is achieved through discussion with pupils, observation of pupils, marking work and the use of our skills-driven assessments. These are updated and reported to the Science and Curriculum Lead on a termly basis.

Monitoring & Evaluation

The Science Subject Leader will monitor and evaluate the teaching and learning of Science through monitoring and evaluation of pupils' work, lesson observations, discussions with pupils and monitoring of our skills-driven assessments. Part of this process is completed with the Senior Leadership Team.

Health & Safety

Pupils will be taught to use scientific equipment safely when using it during practical activities. Class Teachers, Teaching Assistants and those using the equipment will check prior to use and report any damage, taking defective equipment out of action. Teachers will ensure the School Policy for Health and Safety is integrated into Science teaching.

Reporting to Parents

Pupils' progress and achievements will be reported to parents through parent consultations and in termly reports.

Article 12: *Every child has the right to express their views, feelings and wishes in all matters affecting them, and to have their views considered and taken seriously. This right applies at all times, for example during immigration proceedings, housing decisions or the child's day-to-day home life*

Article 28: *Every child has the right to an education. Primary education must be free and different forms of secondary education must be available to every child. Discipline in schools must respect children's dignity and their rights. Richer countries must help poorer countries achieve this.*

Article 29: *Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment).*

Article 31: *Every child has the right to relax, play and take part in a wide range of cultural and artistic activities*