



Science Policy

Introduction

Science stimulates and excites children's curiosity about phenomena and events in the world around them. It allows them to satisfy curiosity with knowledge and to link practical experience with ideas. At Hayeswood School we believe in the value of critical and creative thought and science is a spur for this. Through science children can consider and question ideas and issues that may affect their own lives or the wider world and have many opportunities to develop learning skills.

This policy outlines the purpose, nature and management of science teaching and learning at Hayeswood First School. It was formulated after discussion with the teaching staff; its implementation is the responsibility of all staff.

Aims

In addition to the school aims, in science we aim to:

- * Stimulate and excite pupils' curiosity about changes and events in the world
- * Encourage children to ask questions, suggest ways to answer them and to try out their ideas
- * Enable children to develop the skills of scientific enquiry
- * Help children develop, model and evaluate explanations through scientific methods of collecting evidence
- * Promote children's critical and creative thinking as they explore scientific ideas and issues
- * Engage children as learners through linking ideas with practical experience;
- * Explore with children how scientific ideas contribute to technological change and improve the quality of our everyday lives;
- * Provide opportunities for children to learn about, question and discuss scientific issues that affect their own lives

Approach

We, at Hayeswood, seek to place science into meaningful contexts so that learning in science is purposeful and motivating. Wherever possible science is linked to other subjects and this is clearly identified on medium term plans.

Science is usually taught through topics and cross curricular links are made where possible, though it can also be taught discretely on a weekly basis.

At appropriate times throughout the year the children benefit from a range of identified visiting speakers, trips and activities to support their learning in Science (e.g. school nurse, Planetarium, Marwell Zoo etc).

Content

Objectives for science are taken from the statutory guidelines for science in the National Curriculum. Science in Key Stages 1 and 2 builds on the Early Years curriculum for Understanding of the World. The skills needed for scientific enquiry, such as, asking simple questions, identifying and classifying, using simple secondary sources to find answers, observing closely, using simple equipment to perform simple tests, record simple data, and talk about what they have found out and how they found it out and begin to use simple scientific language, are taught in an ongoing way through the following contexts

in KS1

- Seasonal Changes (Y1 visited every term)
- Plants (Y1&2)
- Animals, including humans (Y1&2)

- Everyday Materials (Y1&2)
- All living things and their habitats (Y2)
- Sound (Y2)

And in KS2

- *Plants (Y3)*
- *Light (Y3)*
- *Rocks (Y3)*
- *Forces and Magnets (Y3)*
- *Animals, including humans (Y3&4)*
- *All living things and their habitats (Y4)*
- *Sound (Y4)*
- *States of Matter (Y4)*
- Electricity (Y4)

Resources

We have a range of science resources which are stored on shelving at the back of the hall and maintained by the science co-ordinator. Measuring equipment, which is needed for scientific investigations, is stored with numeracy resources in badger base quiet room.

Health and Safety

Children are taught how to use all types of equipment with due regard for their own and others' health and safety. Teachers will ensure that all activities are closely supervised and that the children are made aware of the dangers.

Assessment

Formative assessment of children's knowledge in science is carried out at the beginning of each science unit (e.g. class or individual mind maps, providing opportunities for children to suggest questions that they would like to answer). Summative assessments of learning in each unit is undertaken at appropriate times -usually half-termly. Investigative skills are assessed by observation, scrutiny of written recording and discussion with children. This is then recorded on class assessment sheets. Elements of assessments made are shared with parents at the end of each year as a summative assessment on each child's school report.

SEN and Equal Opportunities

All children irrespective of gender, race, religion, disability or SEN have equal access to our science programme. Where appropriate, activities are differentiated to meet children's individual needs.

The role of the Subject Co-ordinator

The subject co-ordinator for Science:

- Oversees the planning and assessment of science in the school
- Is responsible for co-ordinating the writing of a policy in conjunction with other teachers
- Reviews planning and activities so that relevant modifications can be made.
- Monitors the implementation of the Scheme of Work and standards in this subject
- Maintains an action plan and liaises with the Headteacher with regard to the School Development Plan
- Is responsible for updating staff about new developments in science
- Advises colleagues on resources to aid planning and is responsible for monitoring resources

The school is committed to safeguarding and providing for the welfare of all pupils and expects its staff to share in this commitment.