



Science Policy

Rationale:

Science is a body of knowledge built up through experimental testing of ideas. Science is also methodology: a practical way of finding reliable answers to questions we may ask about the world around us. Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills.

Aims:

Our curriculum for Science aims to develop a sense of excitement and curiosity about natural phenomena. Science teaching focusses on:

- encouraging the development of positive attitudes to science;
- building on children's natural curiosity and developing a scientific approach to problems;
- preparing children for life in an increasingly scientific and technological world;
- fostering concern about, and active care for, our environment;
- helping children acquire a growing understanding of scientific ideas and processes;
- building children's self-confidence to enable them to work independently;
- developing children's social skills to work collaboratively with others;
- providing children with an enjoyable experience of science, which may motivate them to study science further;
- helping children to acquire the practical scientific skills of investigation - including observing, measuring, predicting, hypothesizing, experimenting, communicating, interpreting, explaining and evaluating;
- developing the use of scientific language, recording and techniques;
- developing the use of ICT in investigating and recording;
- enabling children to become effective communicators of scientific ideas, facts and data.

Broad Guidelines:

- Science will be introduced in the Early Years Foundation Stage, through activities that encourage children to explore, problem solve, observe, predict, think, make decisions, ask questions and talk about the world around them;
- Children will be encouraged to talk about the observations they make on plants, animals and natural and found objects, show care and concern for living things and the environment and develop an understanding of growth, decay and changes over time;
- Children will be encouraged to talk about how things happen and how things work and notice similarities, differences, patterns and changes;
- The principal focus of science teaching in KS1 will be to enable children to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them;
- The children will be supported to develop their understanding of concepts by developing the skills to work scientifically to answer their own questions;
- The children will be taught methods, skills and processes including observing

changes over time; noticing patterns; grouping and classifying things; carrying out simple comparative tests; using simple equipment; gathering and recording data to help answer questions and recognizing that these questions may be answered in different ways;

- Children will encourage to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways;
- Most of the learning about science will be done through the use of first-hand practical experiences, with the support of secondary resources such as books, photographs, ICT and video;
- A programme of study in KS1 will be used to concentrate on six areas of science;
 1. Working Scientifically (outlined above)
 2. Plants;
 3. Animals, including humans;
 4. Everyday Materials (Year 1) and their uses (Year 2);
 5. Seasonal Changes; (Year 1 only)
 6. Living Things and their Habitats; (Year 2 only)
- Teachers' assessment will take place on a regular basis throughout the programme of study. As a unit of work is taught, the children will be assessed against specific objectives;
- Teachers will use evidence from a range of activities to inform assessment decisions: children's work presented in books; knowledge gained from discussion and practical activities with the child, and from peer to peer discussion. This will give the teacher an overall understanding of the level of development for each child, directly linked to their specific end of year age-related objectives;
- Medium Term Planning will be a record of the full range of approaches used in the classroom. Wherever possible photographic evidence should be used to highlight processes and skills taught within sessions;
- Equal opportunities for all will be promoted through the science curriculum, regardless of race, faith, gender or capability in all aspects of school. Staff will promote self and mutual respect and a caring and non-judgmental attitude throughout the school;
- The Subject Coordinator will monitor the implementation of the policy using teacher's planning, examples of children's work and classroom observations. Changes to the policy will be amended by the co-coordinator and discussed and approved by the Governing body.

Conclusion:

At our school children will be taught not only the knowledge and understanding of Science, but also the processes, skills, values attitudes, language and communication necessary to think creatively within a broad and often cross-curricular framework.

Written/ amended: April 2018

Next Review date: April 2021