

# SCIENCE POLICY

## BUXTON INFANT SCHOOL

This policy was reviewed by the Governing Body on 22<sup>nd</sup> November 2017

It will be reviewed November 2020

Signed:

Date:

# Science Policy

## Definition

Science is an understanding of natural phenomena. It aims to stimulate a child's curiosity to find out why things happen in the way they do.

## Aims

At Buxton Infant School we aim to teach methods of enquiry and investigation to stimulate creative thought. Children learn to ask scientific questions and begin to appreciate the way science will affect their future on a personal, national and global level.

## Objectives

To enable children to:

- Develop knowledge and understanding of important scientific ideas, processes and skills and relate these to everyday experiences.
- Ask and answer scientific questions.
- Plan and carry out scientific investigations, using a range of equipment, including computers, correctly.
- Begin to know and understand the life processes of living things.
- Understand the potential uses of natural and man-made materials and how they may change state.
- Evaluate evidence and present their conclusions clearly and accurately.
- Observe and understand seasonal changes
- Begin to conduct investigations in to electricity, light, sound and natural forces.

## Content

Science will be taught in line with the School's scheme of work which is based on the expectations laid down in the National Curriculum. There will be a strong emphasis on an investigative approach to work and learning through first-hand experience. Teaching will take place with individuals, small groups and the whole class depending on the task, and the work will be differentiated according to the child's ability and understanding.

Full use will be made of the school's garden and conservation area and of the wide range of scientific equipment and resources kept in school. During the Foundation Stage the scientific aspects of the pupil's work will relate directly to the relevant objectives set out within the Knowledge and Understanding area of the Early Learning Foundation Stage Curriculum.

Science will be largely taught thematically through a variety of 'projects'. This will allow the children to begin to use and apply scientific skills and knowledge in real contexts. The areas that will be covered are:

Early Years Foundation Stage (EYFS) - Science is taught in EYFS through class project work with an emphasis on discovery through play and developing skills. Planning is based on the revised syllabus for the Early Years Foundation Stage in the Area of Learning "Understanding of the World". We will provide a range of

experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

Year 1 – Science will be taught during Project lessons in the areas as laid out in the Programmes of Study for the new curriculum as follows:

- Working scientifically
- Plants
- Animals, including humans
- Everyday materials
- Seasonal changes

Year 2 – Science will be taught during Project lessons in the areas as laid out in the Programmes of Study for the new curriculum as follows:

- Working scientifically
- Living things and their habitats
- Plants
- Animals, including humans
- Uses of everyday materials

We may also, at other times, carry out further scientific investigations in to other areas of science such as electricity, forces or sound. These investigations will always be age-appropriate and relevant to the project we are studying at the time.

### **Information and Communication Technology**

ICT will be used in various ways to support teaching and learning. ICT will involve the computer and other audio-visual aids such as a data-logging device. The interactive whiteboard (IWB) is a useful tool for delivering a range of teaching aids and can be used to support activities and enhance the learning of scientific concepts. In addition, teachers may use some of the freely available resources on the internet which allow for effective teaching of Science, including virtual experiments, interactive games and multimedia clips to enhance their lessons.

### **Marking and Feedback**

The marking of work in Science can consist of formal written marking consistent with the Buxton Infant School marking policy for any written work and verbal feedback led by the class teacher or TA for more discussion-based activities such as immediate follow-ups to scientific investigations. Verbal feedback will take place during the lesson and in plenaries. Written marking will take place during the lesson if possible and always before the next piece of written work, with a discussion based on the marking and any corrective measures taken during 'Fix-it' time. Where possible, children will have an opportunity to self-evaluate and peer-mark in a manner consistent with the Marking Policy.

### **Evaluation and Assessment**

Short formative assessments are a part of every Science lesson to check the understanding of the children and to enable the teacher to adjust future lessons to the children's learning. More formal assessments will take place during one or more lessons, usually of an investigative nature, where the teacher will make relevant

notes on each child's level of understanding and participation that can then be used to check each child's progress in relation to end of year/key stage programmes of study.

### **Health and Safety**

Risk assessments will be carried out for any potentially hazardous tasks or materials used in this area of the curriculum. Teachers will also explain the reasons for safety measures and discuss any implications with the children. Children should always be encouraged to consider safety for themselves, others, the environment and the resources they use, when undertaking scientific activities.

### **Monitoring and Review**

The Headteacher, the Science Co-ordinator and the Link Governor are responsible for ensuring the appropriate policy statements, guidelines and Schemes of Work are drawn up and revised in line with the School Improvement Plan.

The Science Co-ordinator and individual class teachers are responsible for the medium and short-term planning.

### **Equal Opportunities**

All children will be given equal access to Science, irrespective of race, gender, creed, level of ability or nationality

Adopted by the Curriculum Committee on **22<sup>nd</sup> November 2017**