



Baslow St-Anne's Church of England Science Policy

Version/ Issue	Date	Author	Reason for Change
1	October 2015	BW	
2	November 2018	L Roberts	Reviewed
3	September 2021	L Roberts	STEM

Principles and Values

At Baslow St. Anne's Church of England Primary School we believe that it is vitally important that everybody is safe, confident and happy in our school community. We aim to provide an environment in which our children feel safe, secure and confident, are respectful citizens in and out of school and nurture the Christian values that underpin all that we do. We believe that our children and staff should lead 'a life in all its fullness', nurturing our vision of growing healthy minds and hearts together. We strive to ensure this is in place to enable every child to achieve their full potential and be prepared for their next step in life.

Introduction

Science is a vitally important part of our every day lives and all pupils should be taught the essential aspects of the knowledge, methods, processes and uses of science. We aim to teach the children through providing an exciting, interesting and informative science curriculum, which is relevant to all aspects of life and provides a breadth of knowledge and understanding to help children develop confidently within a scientific and technological society.

"Children naturally explore the world around them from a very early age. They do this in practical ways by exploring and interacting with their physical environment. They explore ideas, observe their effects, develop new ideas and then test them. The concepts that young children develop are based on first hand exploration.

Primary science activities should capitalise on children's natural abilities and interests. First hand experience is an essential characteristic of primary science so that children come face to face with phenomena and learn directly about the way things are and why they behave as they do. Secondary sources such as books, videos, the Internet, visiting speakers and off-site visits should be used to reinforce and broaden children's knowledge further.

Good science education involves children in a wide range of activities which are practical, relevant, co-operative and satisfying."

The Association for Science Education policy statement for Primary Science.

Aims

We aim to teach the scientific skills, processes and knowledge detailed in the National Curriculum 2014 for Key Stages 1 and 2 in an effective and stimulating way so that all pupils are working to their appropriate level of development, are happy and find enjoyment in the learning process. EYFS follow their curriculum as set out in the framework 2012.

We aim to encourage:

- a willingness to co-operate with others, share ideas and information and develop social awareness and group responsibility
- self-reliance, independence of thought, individual responsibility, perseverance and self-esteem
- a sense of curiosity and open-mindedness, creativity and inventiveness
- the development of working strategies, investigative techniques, skills and attitude appropriate to working scientifically
- the development of scientific concepts
- the ability to apply scientific ideas to real life situations and problems
- the ability to consider evidence, reason and reflect critically and construct explanations about experiences
- a respect for and understanding of the living and non-living environment.
- a broad understanding of the place of science in the world through STEM opportunities

Organisation

The programmes of study set out in the 2014 National Curriculum for Science form the content of the school's curriculum for science, planning is linked to the Scholastic scheme of work 2014. This is divided into year groups to ensure coverage (see appendix) The units are taught in according to the needs and previous learning of each class to ensure a progression of skills and knowledge across the years. The teaching units incorporate ideas and material from a variety of resources.

Science is taught as a separate subject throughout the school, but it is seen in the context of a broad and balanced curriculum. Each year the units are reordered to complement the varying whole school topics. Links with other subjects are explored wherever possible as science encompasses essential concepts, knowledge and skills which help other learning to take place effectively. Competence in communication, problem solving, ICT, numeracy, study skills and co-operation are common to science and many other curriculum areas.

Teaching

Teaching methods vary according to the area of study and the needs of the children. They may include class teaching, individual and group work. There is an emphasis on first hand experience involving the children in a wide range of activities which are practical, relevant, co-operative and satisfying.

In teaching science we follow these guidelines:

- Focus on one unit each half term
- Make lessons as practical as possible
- Give opportunities for lots of discussion
- Opportunities for STEM learning
- Ensuring all children understand the learning objective
- Make written work relevant and useful
- Encourage the children to write in their own words.
- Support the children with recording sheets and writing frames
- Use ICT
- Emphasise relevant links to everyday life, making science purposeful and helping the children understand the many cross curricular links
- Require the children to consider safety in all activities
- Ensure children understand and are able to partake in investigations to enhance their understanding of areas of science
- Celebrate science through display in the classroom

Equal Opportunities and Differentiation

Teachers are aware of any G&T or SEN pupils and plan appropriate science activities to ensure that a broad and balanced science curriculum is accessible to all, regardless of race, gender or ability.

Health and Safety

Teachers consider any potential hazards involved in practical work. They assess the level of risk to the children and themselves and plan accordingly. The children are made aware of any potential hazards and taught to work safely. They are expected to act in a disciplined, co-operative manner at all times. All equipment is inspected regularly and checked by the teacher before use.

Assessment

Record keeping and assessment follow the attainment targets for the national Curriculum and are updated regularly. Records of children's progress are compiled by the class teacher and Science co-ordinator. They are passed on to the next class teacher at the end of the year. They provide information to allow verbal and written reports to be made to the parents.

Children's development in the learning of science is a continuous process and assessment is on going and a part of everyday classroom activity. Self-assessment sheets or mind maps are used at the start of each unit of work to find out what they know, understand and can do. This information is then used by the teacher to inform the planning of that series of lessons. After the unit progress is reassessed.

Resources

A range of science resources are available and teachers are responsible for informing the coordinator of resources they may require. There is some scope within the school grounds for environmental studies but we also use the wider environment (orchard, Baslow Woodland Park) and are in the process of introducing opportunities through 'forest school'.

Outside speakers are invited into school to talk about relevant issues, e.g. dental health, healthy eating, and visits are arranged to support science topics. Links are held with cluster schools including our feeder secondary school (Lady Manners).

Pupils are instructed in the safe use of resources and are expected to use them with care and consideration.

Policy reviewed by L Roberts (Science Co-ordinator)

Date : November 2021

Review Date: November 2024

Chair of Governor's signature: Date:.....