



| | |
|-----------------------|-------------------------------|
| Reviewed on: | Nov 2018 |
| Next review: | Nov 2021 |
| Staff Responsibility: | Anna Harrison and Rebecca Few |
| Linked policies: | Teaching and learning |
| Singed by chair: | L. Rowbotham |
| Date: | 22.11.18 |

Boarshaw Community Primary School **Science Policy**

Introduction

At Boarshaw Community Primary School we value Science because it makes an increasingly important contribution to all aspects of life. We aim to nurture each child's natural curiosity about their environment on a personal, national and global level. We believe that Science makes a valuable contribution to a child's knowledge and understanding of their world.

General Aims

These aims are intended for all pupils in school. How they are implemented will be dependent on the age, ability and individual needs of the pupils in each class:

- To develop the best practise of learning, where possible, through investigation and first-hand experience within the child's physical environment,
- To develop skills of planning, carrying out and evaluating investigations across the 2014 Science curriculum and throughout the school,
- To develop knowledge and understanding of important scientific ideas, processes and skills and to relate these to everyday experiences,
- To learn about ways of thinking and to find out about different ways to communicate ideas,
- To ask relevant questions to further their understanding of scientific processes,
- To explore values and attitudes through Science,
- To incorporate ICT through virtual investigations and use of data collection equipment,
- To record their findings in a variety of stimulating and purposeful ways: building upon prior science learning, both skill and knowledge based.

Teaching and Organisation

We aim to teach Science in an investigatory, interactive way using a variety of teaching methods. Our principle aim is to develop children's knowledge, skills and understanding. We aim to use enquiry based learning where possible to engage children with their tasks and encourage them to develop as Scientists. Children are encouraged to ask, as well as answer, scientific questions. They will have the opportunity to plan, carry out and evaluate experiments from which they can draw conclusions and come up with answers to their own scientific enquiries. Children will also have access to other data such as photographs, graphs, pictures and photographs which can be used to support and extend their ideas. The children will also be encouraged to use their computing skills to research information and present data from investigations. Children will be encouraged to think logically and systematically when discussing scientific problems as part of peer groups.

It is recognised that in each class there will be children with widely different scientific abilities. Therefore we will ensure that we provide suitable learning opportunities for

all children, ensuring that activities are accessible to each child. We achieve this in a variety of ways by:

- Setting common tasks which are open-ended and have a variety of purposes,
- Encouraging mixed ability team work where the children can interact with their peers and ask questions,
- Grouping children by ability and providing each group with an appropriate task,
- Providing resources of different complexity, matched to the ability of different children,
- Encouraging children to develop strategies for independent learning and problem solving,
- Support from Teachers and Teaching Assistants to support the work of individual children or groups of children as planned.

Planning

The school uses the National Curriculum 2014 objectives as the basis of Science planning in Key Stage 1 and 2. We use the Rising Stars Switched on Science scheme of work to enhance our teaching of science. Science in the Foundation Stage is planned through the understanding the world aspect of the EYFS curriculum.

Science is planned using a medium term planning format for each half term and links with each term's topic where appropriate. If it is not appropriate then discrete sessions are taught in order to meet all of the objectives for each year group.

Science planning across the school takes into account prior knowledge and builds upon prior learning. At the beginning of each new topic we ensure prior knowledge is known by eliciting children's ideas. We ensure that there are opportunities for children of all abilities to develop their skills and knowledge of their year group's objectives to ensure progression of skills throughout the school.

Inclusion and Equal Opportunities

All children have an equal opportunity regardless of gender, race or ability, to progress and succeed in their scientific learning and understanding. We pay particular attention to ensuring there is no gender bias in materials or in access to resources, including ICT. Teachers should pay attention to the equal distribution of their questions across all groups. Any displays and references to this subject in society should show positive role models of gender, race, ethnicity and disabilities.

Monitoring and Evaluation

Provision for Science is monitored and reviewed on a regular basis.

This is achieved by:

- the Science Coordinator will monitor resource provision, identifying shortfalls, identify aspects within curriculum subjects to be included in teacher planning.
- The SLT shall have oversight of this policy and monitor the provision of Science.