

Howden-le-Wear Primary School



Science Policy

Policy and Practice

Introduced: February 2018

Review Date: February 2019

Reviewer: Headteacher

Adopted by the Governing Body: 6th February 2018



Howden Le Wear Primary School



Science Policy

Aims and Objectives:

We live in an increasingly scientific and technological age where children need to acquire the knowledge, skills and attitudes to prepare them for life in the 21st century. We, at Howden-le-Wear Primary School believe that the teaching of science develops in children an interest and curiosity about the world in which they live, and fosters in them a respect for the environment. Through the framework of the National Curriculum 2014, science aims to:

- ❖ Equip children to use themselves as starting points for learning about science, and to build on their enthusiasm and natural sense of wonder about the world.
- ❖ Develop through practical work the skills of observation, prediction, investigation, interpretation, communication, questioning and hypothesizing, and increased use of precise measurement skills and ICT.
- ❖ Encourage and enable pupils to offer their own suggestions, and to be creative in their approach to science, and to gain enjoyment from their scientific work.
- ❖ Enable children to develop their skills of co-operation through working with others, and to encourage where possible, ways for children to explore science in forms which are relevant and meaningful to them.
- ❖ Teach scientific enquiry through contexts taken from the National Curriculum for science.
- ❖ Encourage children to collect relevant evidence and to question outcome and to persevere.
- ❖ Encourage children to treat the living and non-living environment with respect and sensitivity.
- ❖ Stress the need for personal and group safety by the correct usage and storage of resources.
- ❖ To enable children to appreciate that we do not always know the answers and results when carrying out scientific enquiry.

The Philosophy and Ethos:

We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Through the National Curriculum 2014 science document children will acquire and develop these skills throughout their Primary years.

We believe that science promotes communication in a specific and precise language involving mathematical and logical thinking. It allows children to develop ways of finding out for themselves and gives them practice in problem solving.

As their knowledge and understanding increases and they become more proficient in selecting and using scientific equipment and collating and interpreting results they will become increasingly confident in their growing ability to come to conclusions based on real evidence. Science fosters a healthy curiosity in children about our universe and promotes respect for the living and non living. It allows children to develop original ideas and a questioning attitude.

In science, pupils are encouraged to be open- minded and to try and make sense of what they see and find out. The main focus of our approach will be through open-ended activities where we encourage children to recognize the need for fair testing.

Equal Opportunities:

At Howden-le-Wear Primary School we are committed to providing all children with an equal entitlement to scientific activities and opportunities regardless of race, gender, culture or class.

Inclusion:

In school we aim to meet the needs of all our children by differentiation in our science planning and in providing a variety of approaches and tasks appropriate to ability levels. This will enable children with learning and/or physical difficulties to take an active part in scientific learning and practical activities and investigations and to achieve the goals they have been set. Some children will require closer supervision and more adult support to allow them to progress whilst more-able children will be extended through differentiated activities. By being given enhancing and enriching activities, more-able children will be able to progress to a higher level of knowledge and understanding appropriate to their abilities.

Assessment and Record Keeping:

Assessment for learning is continuous throughout the planning, teaching and learning cycle. At the end of the year, children are given a level based on skills ladders and National Curriculum levels. Judgments are based on evidence gained through a variety of sources, including:

- ❖ Observing children at work, individually, in pairs, in a group, and in classes.
- ❖ Questioning, talking and listening to children
- ❖ Considering work/materials / investigations produced by children together with discussion about this with them.
- ❖ End of unit assessment tests or assessments.

Children's progress is continually monitored and tracked throughout their time at Howden-le-Wear School, by the Science coordinator.

Health and Safety:

In regard to science work in school all teachers will be conversant with the "Be Safe" safety booklet.

Where appropriate reminders will be given to children about potential hazards and care of the equipment they are using.

Any trips should have been planned with due regard to the school policy on taking children on outings. LEA guidance may need to be sought on trips involving farms etc.

How we teach Science:

- ❖ At Howden-le-Wear we teach Science using various units of work that meet the requirements of the National Curriculum 2014, and the Early Years Foundation Stage 2012.
- ❖ We recognise investigation as an essential strand of scientific learning and therefore ensure every unit taught contains at least one scientific investigation. Whenever

possible, children are encouraged to lead these investigations, with the teacher taking the role of facilitator.

- ❖ There is a move towards Science being taught in a cross-curricular fashion, or at least linked with and used in other curriculum areas, especially Computing.
- ❖ Classrooms will normally contain a Science display that reflects the unit being covered; these displays should have current Science Vocabulary displayed, in addition to examples of children's work.

Resources:

- ❖ General resources are kept in labelled boxes in the Science Cupboard, which is located in the Key Stage 1 corridor. The Foundation Stage keep additional resources in their classroom and outdoor area.
- ❖ Computer software can be found with the Coordinator.

Signed: _____ Governor from Curriculum/Standards Committee

Date: _____

To be reviewed: February 2019