



Eccleston C.E. Primary School
Let Our Light Shine

Science Policy

Teaching, Learning and Personnel Committee

Reviewed: Spring 2019

Approved by Teaching, and Personnel Committee: Spring 2019

Approved by Full Governing Board: Spring 2019

Signed by Chair of Governors:

Review Date: Spring 2022

ECCLESTON C.E. PRIMARY SCHOOL

Policy for Science

RATIONALE:

All children are naturally curious about their environment and Science makes a valuable contribution to their knowledge and understanding of the world. Science makes an increasing contribution to all aspects of life.

AIMS:

To further the development of science teaching, monitoring and assessment of science within the school. To promote investigation and enquiry at Eccleston Primary School

Staff at Eccleston are committed to achieving these aims through;

- developing high standards of pupils' scientific skills (Sc1).
- ensuring that pupils develop science knowledge and understanding of life processes and living things (Sc2), materials and their properties (Sc3) and physical processes (Sc4).
- encouraging pupils to question, reason and explain.
- developing pupils' full potential by setting suitable challenges and responding to their diverse learning needs.
- assessing and evaluating teaching and learning on a regular basis.

TEACHING:

A wide range of teaching styles will be used with a focus on practical investigation. Staff will integrate the development of scientific enquiry skills into all science teaching.

Teaching to children in the Early Years Foundation Stage (Reception) will ensure that children are involved in practical activities to stimulate interest, increase knowledge, allow them to make decisions about what to investigate and how to do it.

Science teaching from Year 1 to Year 6 will give children the opportunity to carry out the whole process of investigating an idea, enabling pupils to focus on developing their enquiry, reasoning, processing, evaluating and creative thinking skills and promote their ultimate understanding of the subject. Sc1

objectives will be shared with pupils during lessons and be evident in pupil work books.

PLANNING:

Children in the Early Years settings will be taught science as part of an integrated curriculum. Planning will reflect the inclusion of developing scientific skills into all EYFS curriculum.

For Years1-6, science will be organised and taught in block units as in the National Curriculum, taking some guidance for planning from the QCA units. Both KS1 and KS2 will ensure full coverage of the curriculum, and a planned progression of learning, over time through Long Term Planning in 2 or 3 year cycles. However, science will not necessarily be taught in discrete sessions as attempts will be made to link learning to the class topic and take a cross-curricular approach.

Teachers will plan to give children opportunities for;

- First -hand observations and exploration.
- Investigating and problem solving
- Discussion and evaluating.
- Using different methods to discover and record, including ICT.

CHILDREN'S RECORDING OF WORK:

A variety of approaches are encouraged to record work in Science.

Development in the EYFS will be recorded through adult observations and photographs. These will be used to inform future planning. Key Stage 1 children will begin to communicate their ideas and findings through diagrams, pictures and organised writing. These may be supported by photographic evidence. By Key Stage 2 children will be encouraged to adopt more formal recording methods for writing up investigations. Results will be displayed in tables, charts and graphs sometimes using ICT.

Evidence of science activities will be reflected through displays around the school, where the children's work will be seen to be valued and celebrated.

ASSESSMENT:

Early Years assessment will be by adult-led observations recorded on the EYFS profile sheets. Much of science learning comes under the area of 'Understanding the World' but is also reflected in the other areas of learning.

Key Stage 1 assessment will be through teacher assessment based on questioning and observation. These observations will be linked to each unit of work and leveled against National Curriculum attainment targets. Investigations will be recorded in topic books.

Key Stage 2 assessment will be through teacher observations and end of unit tests. Summative tests will be carried out at the end of each academic year (Optional/SATs). Investigations will be recorded in topic books.

End of year pupil assessment information will be held in a central database. Data will be fed through to the next year-group teacher. Analysis and evaluation of this data will inform the raising of standards in the school. Analysis of data aims to highlight strengths and weaknesses in all areas of science.

Reports to parents will identify where children's strengths lie and areas for future development.

HEALTH AND SAFETY:

When working with equipment and materials in practical activities, pupils will be taught to recognize hazards and take steps to reduce risks to themselves.

Further information on specific health and safety issues can be sought from;

- ASE 'Be Safe'
- CLEAPPS

EQUAL OPPORTUNITIES:

Differentiation will support pupil needs and work will be closely monitored to ensure that the science curriculum is appropriate and accessible to all pupils regardless of gender, race or ability. Adaptations will be made in planning to support SEND or more able pupils, those with physical impairments or where cultural issues need to be considered.

MANAGEMENT AND ORGANISATION:

Pupils will normally be organised into small groups and encouraged to work cooperatively. The group size will be determined by age, task and ability of pupils.

The school is committed to giving opportunities for staff training and development as necessary.

The role of the Science Subject Leader is to support the teaching and learning of science and to help raise levels of science throughout the school by:

- Monitoring teaching and learning.
- Scrutinising pupils' work.
- Monitoring planning.
- Ensuring continuity and progression of the teaching and learning in science across the stages in school.
- To review the Science Policy.
- To report to and liaise with governors.

CROSS CURRICULAR WORK

In line with our curriculum, Science is linked with our cross curriculum approach. Children will be applying a range of knowledge and skills from different subject areas to pursue a key line of enquiry. This will help to make the children's science more meaningful and will therefore enhance their learning. Mathematical skills very often link naturally, in terms of measurement and recording. English reading and writing skills work alongside the Science curriculum as children report their learning to others, either in a written form or orally.