Grindleton CE Aided Primary School

SCIENCE POLICY STATEMENT

In the same way, let your light shine before others that they may see your good deeds and glorify your father in heaven.'

Matthew 5 v16

Introduction
Science is a part of everyday life and is therefore a life skill. It enables pupils to develop their understanding of the world around them by investigating that world, and by developing an appropriate body of knowledge and skills. It offers pupils challenge, excitement and enjoyment as a subject within its own right.

Rational
We believe that all pupils of this school must have regular access to science appropriate to their age and stage of development and that emphasis should be given to this as a core subject.
Learning opportunities will follow and build upon the National Curriculum guidelines.

Aims

- To enable children to develop a knowledge of appropriate scientific facts.
- To encourage curiosity in children about their environment through a practical approach.
- To organise practical activities and investigations so that children are able to communicate their work in a variety of ways.
- To plan programmes of work to enable pupils to develop concepts through a broad range of experiences.

- To enable children to develop an enquiring mind. To have the desire, knowledge and ability to find out about the world around them.

National Curriculum coverage
Coverage is ensured by planning from the National Curriculum Document
Full coverage of the programmes of study for key stage 1 are planned over a 2-year cycle. At key stage 2, coverage of appropriate areas of the programmes of study is planned over a 4-year cycle. Re-visiting, reinforcement and extension of learning is carefully planned for throughout the school.

Equal Opportunities
Attention will be given to planning the science curriculum to make it equally relevant to all the children, regardless of race, creed or gender.

Methodology
Time
- The amount of time devoted to science is 1.75 hours at key stage 1 and 2.25 hours per week at key stage 2.
- Science is a timetabled subject.

Teaching and learning styles
Science is planned and taught by individual teachers. The school is arranged into two groups for science; EYFS and Key stage 1 and Key Stage 2. Differentiation takes place for group ensuring the appropriate programmes of study and skills are delivered to the correct children.

A variety of teaching methods are employed as appropriate ensuring that children take responsibility for their own learning. Science regularly involves the children in practical work through small-group and whole class activity groups.

Teaching methods include:
- Whole – class teaching
- Experimental learning
- Discovery methods
- Problem solving
- Open-ended investigations

Planning, continuity and progression

Long/medium and short-term plans are monitored by the Headteacher and science co-ordinator.

Activities are planned to follow through a planned area of attainment target to allow children to develop concepts and skills and to progress according to their ability.

Cross Curricular Themes/Dimensions

Science is not always taught in isolation but will naturally draw from and contribute towards other areas of the curriculum. When appropriate to do so, science will be taught in conjunction with these other subjects.

Differentiation
Activities are matched to specific ability and aged groups. Opportunities are planned for open investigations that allow for differentiation.

Special Educational Needs
These are addressed by:
- Inclusion in schemes of work
- Being a criterion in selection of resources.

Liaison with other schools

- The coordinators of both schools in the collaboration work closely together and they have the capability to arrange monitoring and moderation meetings with other schools in liaison with the head teachers.
- Written records are passed on to the next school when requested.

Health and Safety

All staff teaching science are conversant with the Health and Safety policy and relevant regulations (see appendix 1 CLEAPSS "Model Health and Safety policy for Science in Primary Schools")

INSET and Professional Development

The INSET programme is organised as whole-school plan to achieve a balance between school and individual needs. Planning for inset is on an annual basis.

Role of the Co-ordinator

The co-ordinator leads planning sessions, orders new equipment and book materials as appropriate and updates staff by attending INSET and disseminating information.

The co-ordinator is available to:

- Co-ordinate the distribution and retrieval of resources
- Select and order loans, new equipment and book materials as appropriate
- Introduce new materials and resources to staff and demonstrate their use.

Resources

Practical Equipment

- The school is continually developing resources for science teaching
- Science equipment is sorted into topic boxes and stored in the hall cupboard.

Written resources

- Teacher reference material is available to help with background science. This is stored in the staff room.
- Books on science topics are available in the library and as project loans from the school library service.

Educational Visits

Visits are directly linked to on-going work in the classroom.

Assessment

Purpose

Assessment is used

- To help with future planning
- To report to pupils, parents, other teachers and governors
- To motivate pupils

Teacher assessment

Assessment of each pupil's achievement with a unit of work is made at the end of each unit of work.

Assessment techniques include:

- Observations of pupils at work
- Questioning
- Pupils' discussions or oral presentations of their work
- Pupils' written, graphical or pictorial work
- Structured work sheets or questions
- Science tests

Opportunities are provided for open-ended investigations to be carried out on a regular basis.

Recording

- Summative records are kept, of the National Curriculum covered by the class.
- Individual records of pupil achievement are kept by teachers in the form of annotated pupils' work.

Reporting

Written records are passed on to the next school.

Pupil's progress is reported back to parents once a year.

Evaluation and moderation

The science policy is monitored by the subject leader and changed accordingly. It is reviewed by the Headteacher, the staff and the governing body at informal and formal meetings.

We will judge the success of our teaching by:

- The motivation and interest displayed by our pupils
- The development, over time of pupils' understanding of scientific concepts and progresses.
- Attainment of the children against other areas of the curriculum (English, Maths)

The subject leader maintains a folder containing examples of pupils' science work at different levels and for different programmes of study for purposes of monitoring, moderation and agreement.

Written; November 2023
To be reviewed; September 2024

Signed; Chair of Governors