

# Sibsey Free Primary School



## Science Policy

Approved by: Headteacher

Date: July 2023

Last reviewed on: July 2021

Next review due by: July 2025





- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings.

### **Programme of Study**

- Plants & Animals (including humans)
- Rocks
- Light
- Forces and magnets
- Living things and their habitats
- States of matter
- Sound
- Electricity

### **Upper Key Stage Two**

#### **Working scientifically**

During Years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments

### **Programme of Study**

- Living things and their habitats
- Animals (including humans)
- Properties and changes of materials
- Earth and space
- Forces
- Evolution and inheritance
- Light
- Electricity



The early stages in the development of investigative skills are introduced to children in the Foundation Stage and they are given opportunities to observe everyday objects and events - making use of all their senses, asking questions, looking for similarities and differences and developing the skills of sorting and classifying.

Although taught as a separate subject in both KS1 and KS2, Science is placed, wherever possible, within everyday contexts and cross-curricular links identified and exploited - particularly in ICT and Maths.

Teachers have responsibility for ensuring that all classroom helpers and pupils are aware of any health and safety issues connected with particular science work. All Science activities comply with the guidelines in the school health and safety policy and children, particularly in KS2, are encouraged to discuss safety implications concerning themselves and others when undertaking work in Science.

Activities are planned in such a way as to encourage full and active participation by all children irrespective of ability. Support is given to pupils for whom the use of resources and materials proves difficult because of a physical or sensory disability.

Science equipment is available to all classes and is stored in the Science cupboard or in classrooms if appropriate. Wherever possible the resources needed for any unit of work should be displayed in the classroom so that children may select the most appropriate equipment for themselves.

Y5 and Y6 pupils also receive sex education in the form of a video, talk and discussion. Related topics are covered in the school PSHE and sex education policies.

## **Cross Curricular Learning**

Every attempt should be made to ensure that Science builds on and enhances cross curricular learning.

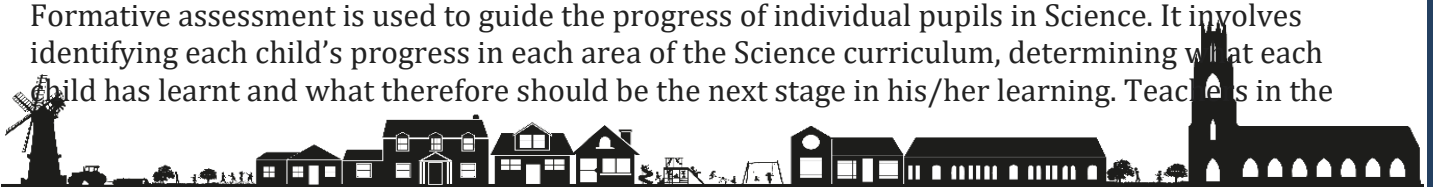
### **ICT**

Teachers are encouraged to ensure that ICT is used wherever possible in the children's learning in Science. Opportunities for children to integrate ICT into their Science work are provided through the use of graphical design, computer control, monitoring the environment, digital cameras, digital movie makers and applications such as Microsoft Excel, Word, Publisher and Power Point. The aim is to allow children to see the opportunities for ICT and to integrate it naturally into their Science work.

### **Assessment (including AFL and APP)**

Assessment for Learning (AFL) is used with the children each time Science is taught. This takes the form of teacher discussion with the children, teacher and teaching assistant marking of children's work and the use of self and peer assessment. AFL is based on the success criteria for the lesson and informs the teacher as to the skills and knowledge gained by the children as well as the next steps to take them forward in their learning. AFL is used alongside a range of strategies to inform the teacher as to what level of attainment the children have reached. This is part of Assessing Pupil Progress (APP).

Formative assessment is used to guide the progress of individual pupils in Science. It involves identifying each child's progress in each area of the Science curriculum, determining what each child has learnt and what therefore should be the next stage in his/her learning. Teachers in the



course of their teaching usually carry out formative assessment informally.

Suitable tasks include:

- Small group discussions, usually in the context of a practical task.
- Specific arrangements for particular pupils.
- Individual discussions in which children are encouraged to approve their own work and progress.

Summative assessment takes place at the end of each term and at the end of each academic year, when a level of the child's attainment is given. This assessment may be carried out through discussion and/or assessment sheets.

Children's attainment and achievement in science is tracked throughout the school.

Moderated and challenging targets are set at the beginning of the academic year and children's progress towards these targets is closely monitored by class teachers and the Headteacher. Teachers keep up to date assessments based on the children's on going work and regular formal assessments which are given to the Headteacher and science coordinator.

The children are encouraged to carry out Peer and Self-assessment alongside teacher assessment for learning. It is essential that children receive regular assessment for learning on their progress so that they know the next steps for their learning. The feedback children receive should be based on the outcomes of the lesson and reflect achievement against the success criteria and the effort that the child has made. The child should be able to clearly understand the success of their learning and the amount of effort they have put in. This can be written or verbal depending on age, ability, activity and time available.

### **The Role of the Leadership Team**

The Leadership Team will:

Ensure that each member of staff is aware of this Policy.

Review and update this policy, in consultation with the teacher responsible for this area of the curriculum where appropriate.

Offer support to any staff member who needs it.

Make themselves aware of new developments in this subject area relevant to primary schools.

