

**Clifton with Rawcliffe Primary School
Science Policy**



Date of policy: September 2017

Date of review: September 2019

Person Responsible: S Dagnell and John Ainscough

Description of school / background information in provision of science

Clifton with Rawcliffe Primary School is an above average size school. Nearly all pupils are from a White British background. The proportion of pupils entitled to free school meals is well below the national average. The number of pupils with learning difficulties and/or disabilities is well below the national average and the proportion of pupils with a statement of special educational needs is half the national average. All pupils take part in regular curriculum based science activities and experience a wide range of skills and techniques.

Roles and responsibilities

Governors

The Governing Body (Policies Committee) has been involved in the development of the school's Science policy. It will continue to review and evaluate it regularly. The link Governor for this subject area will liaise with the Subject Leader on a regular basis.

Identified member of staff

An identified member of staff takes overall responsibility for this policy and its implementation and for liaison with the governing body, parents, other staff members, Local Authority (LA) and relevant outside agencies.

Parents and guardians

Parents and guardians are encouraged to support the provision of science within the school programme and have access to this policy. The school plays its part in ensuring that parents and guardians are kept up to date and are notified about after-school and other science-related activities, such as Science Week, via the regular school newsletter and letters sent home with pupils.

Pupils

Pupils have an entitlement to science.

Staff

All staff, both teaching and non-teaching, should be aware of the policy and how it relates to them. Any staff involved in science activities should have opportunities for relevant training.

Senior Leadership Team (SLT) and the Science Subject Leader will also ensure regular in-school training through lesson support and whole school School Improvement Sessions.

Adults Other Than Teachers (AOTT)

The school actively seeks to include AOTTs to assist and supplement the science provision, both in the curriculum and after-school. These are overseen and timetabled by the Phase Leaders to ensure quality and suitability. DBS information is collected, where appropriate, and stored in the school office.

Aims and objectives of the policy

In studying science, pupils gain understanding about how ideas contribute to scientific change - impacting on industry, business and medicine and improving the quality of life. They learn to question and discuss issues that may affect their own lives, and the future of the world.

The aims of science are:

- To engage pupils as learners at many levels through linking ideas with practical experience
- To stimulate and excite pupils' curiosity about changes and events in the world and to enable them to satisfy this curiosity through enquiry and understanding
- To link pupils' understanding with scientific thought and thus develop a greater understanding of the world in which we live and their responsibility to ensure its sustainability

Commented [WU1]: Do we change this to our Science Principles?

The objectives of science are:

- To help pupils develop, model and evaluate experiments using critical and creative thought
- To develop pupils' questioning and analytical skills,
- To develop pupils' understanding of how major scientific ideas contribute to technological change and how this impacts on improving the quality of our everyday lives,
- To ensure teaching styles and methods in science vary to suit the type of learning and the pupils' differing learning styles and abilities.
- Provide appropriate and sufficient scientific resources for all pupils that will support effective learning
- To ensure that pupils have the opportunity to:
 - Plan and carry out scientific investigations including ICT equipment correctly
 - Ask and answer scientific questions
 - Evaluate evidence and present their conclusions clearly and accurately
 - Develop a variety of other skills, including those of enquiry, problem solving, ICT, investigation and different means of presentation in a cross-curricular way.

Teaching programme and strategies

Sympathetic and varied teaching approaches and specific learning objectives provide stimulating, enjoyable, satisfying and appropriately challenging learning experiences for all pupils. Through the selection of suitably differentiated and well-developed tasks, it is intended that pupils, irrespective of their ability, will enjoy success and be motivated to develop further their individual potential in science.

Children have further opportunities to explore science themes and ideas through outdoor learning, provided through areas such as the Forest School and outdoor science and maths area. We encourage the children to ask and answer scientific questions.

The teaching of science offers opportunities to support the social development of children. Groupings allow children to work together and give them the chance to discuss their ideas and feeling about their own work and the work of others. The children learn to respect and work with each other and with adults, thus developing a better understanding of themselves.

The work covered at Key Stages 1 & 2 is built on the National Curriculum Programme of Study. Under the new EYFS Framework, Science is covered by the objectives in the specific area of learning 'Understanding the World'. It is in three parts: People and Communities; The World; and Technology. Careful planning and observed assessment of the objectives takes place throughout the year for each child.

Science has considerable potential to contribute to much wider areas of learning. It is considered important that science is integrated into different subject areas for the development of skills.

Curriculum Planning

This is organised in three stages:

Long term planning

This is based on the National Curriculum for Science, which details what is to be taught over the Key Stages and provides the topic basis for planning Science activities over a two-year cycle. This is undertaken by the Science Subject Leader. It is monitored regularly and evaluated annually.

Medium term planning

This takes the long term plan and organises the teaching of Science into termly or half-termly sections. The planning is more detailed and the objectives are more specific in nature. This planning is developed by the class teachers, who respond to the needs of their pupils. It also ensures a balanced distribution of work is undertaken across each term.

Short term planning

Short term planning details the activities that take place over two weeks. Lessons are planned in detail and specific class objectives are set, in accordance with the needs of the pupils. Individual learning goals might also be set for pupils in some lessons.

Teachers collaborate on the planning of science to ensure parity in provision and to share expertise.

Safety

In their planning of activities, teachers will anticipate likely safety issues. They will also explain the reasons for safety measures and discuss any implications with the children. Children are always encouraged to consider safety for themselves, others, the environment and the resources they use, when undertaking in art activities.

When undertaking certain activities a risk assessment may be needed in accordance with advice from CLEAPSS.

Commented [WU2]: Should we say we will consult with CLEAPSS advice? I am a member, but the school is not.

Monitoring and assessment

The Science curriculum is monitored on a regular basis by the Subject Leader, who examines pupils' work, monitors classroom practice and planning and ensures parity of entitlement for all pupils across the school.

S/he identifies the training needs of the staff and plans the training programmes. S/he also attends training for Science Subject Leaders run by the local authority and other providers.

We assess children's work in science using objectives from the National Curriculum. These are uploaded onto the Subject Tracker (whole school assessment tool).

Formative assessments, which are continuous and ongoing, identify the needs of the individual pupils. These form part of the science activities and are used to determine the pupil's future developmental areas. These also inform judgements for the school Subject Tracker.

The monitoring of the standards of children's work and of the quality of teaching in science is the responsibility of the SLT and the Science Subject Leader. The work of the Subject Leader also involves supporting colleagues in the teaching of science, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.

Additional educational needs

All classes consist of pupils of varying abilities and with varying needs, and our classroom practice ensures that, when possible, these needs can be met within the class organisation.

However, when a child has very specific additional needs, support is provided firstly by the school's internal organisational structure, which gives personal assistance and additional practice and is administered by support assistants within the school during the lessons. Details of this can be found in the SEND Policy.

Implementation of the policy

A copy of this policy is available for any member of staff, Governing Body, parents and relevant outside agencies.

Date of Implementation September 2017

Monitoring and evaluating the policy

This policy will be reviewed every two years by the Head teacher, Governing Body Policies Committee, Subject Leaders and relevant staff members.

Next review date: September 2019