Clutton Primary School



Science Policy

Rationale

For young children science is an introduction to the world of living things, materials and energy. Learning in science is fundamental to understanding the world in which we live. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science.

Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognize the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave and analyze causes

Aims

Science teaching should offer opportunities for children to:

- develop scientific knowledge and conceptual understanding through the specific areas of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific question about the world around them
- be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

School Curriculum

The Programmes of Study for Science are set out year-by-year for Key Stages 1 and 2. Clutton School will ensure that these relevant programmes of study are taught by the end of the key stage. Within each key stage, we have the flexibility to introduce content earlier or later than set out in the Programme of study. In addition we can introduce key stage content during an earlier key stage if appropriate.

Planning & Assessment

Planning is undertaken at two levels:

Long term Planning

Planning is based on the yearly teaching programs set out in Clutton curriculum mapping document, it links the programmes of study with Tom Robso'ns scheme of science from Somerset County Council. Teachers adapt long term plans to cater for the needs of specific cohorts of pupils and individuals within these groups.

Medium/Short term Planning

Weekly plans detail appropriate learning opportunities and learning reviews. Assessments against a mastery curriculum are conducted by staff and contribute towards the end of year report.

Cross Curricular Links

Wherever possible Science will be incorporated into creative cross-curricular topic work ensuring balance and progression in knowledge and skills. Science will also be taught in specific 'skills' lessons and ICT will be used wherever possible to support science.

Teaching Methods

It is important that the teacher identifies the most appropriate teaching strategy to suit the purpose of a particular learning situation.

There are a variety of ways in which the teaching may be effective and our school has a tradition for encouraging learning through investigation. It is also acceptable to use demonstration, research, exploration and teacher-led investigations when circumstances, resources and the needs of individuals and groups allow.

Teachers need to use their enthusiasm and professional judgment to identify the most sensible, enjoyable and safe methods for the work being conducted. The scheme of work provides additional quidance in the selection of the most effective approach.

Key Stage 1

The focus of science teaching in Key Stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural world around them. They will be encouraged to be curious and ask questions about what they notice. They will be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information.

Lower Key Stage 2

The focus of science teaching in lower Key Stage 2 is to enable pupils to broaden their scientific view of the world around them. They will do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions.

Upper Key Stage 2

The focus of science teaching in Upper Key Stage 2 is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. They should do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically.

Marking

See feedback policy

Reporting

Parents receive an annual written report on which there is a summary of their child's effort and progress in science over the year. Reports also indicate pupil attainment against national standards.

Equal Opportunities

See equal opportunities policy

Homework

See homework policy

Health & Safety

See health and safety policy

Role of the Coordinator

To demonstrate good practice in the teaching of science.

- To support colleagues.
- To monitor science teaching in the school through:

lesson observations, the regular undertaking of work scrutiny talking with children and staff, updating staff on latest guidelines and initiatives analysis of pupil data and specific pupil groups ensuring resources and equipment are readily available and centrally stored.

A yearly action plan will identify areas for development and detail how these will be addressed.

SEN/Gifted & Talented Pupils

We teach science to all children, whatever their ability. Science forms part of the school's curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities matched to the needs of children with learning difficulties and we take into account the targets set for individual children in their Individual Education Plans (IEPs).

Monitoring & Review

This policy will be reviewed every two years

C.Webb Coordinator February 2015 Review: February 2017