



A high-quality Science education provides foundations for understanding the world. Science has changed our lives and is vital to the world's future prosperity. Through building key foundational knowledge and concepts, pupils should be encouraged to recognise the power of explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how key knowledge and concepts can be used to explain what is occurring, predict how things will behave, and analyse causes. This understanding should be consolidated through their appreciation of applications of Science in society and the economy.

Intentions:

- To stimulate and excite a child's curiosity about natural phenomena and events in the world around them.
- Enable children to understand how major scientific ideas contribute toward technological change – impacting on industry, medicine, business and improving quality of life.
- To question and discuss science-based issues that may affect their own lives, the directions of society and the future of the world.

National Curriculum for Science aims to ensure that all children:

- Develop scientific knowledge and conceptual understanding to prepare them for life in an increasingly scientific and technological world.
- Develop an understanding of the nature, processes and methods of science through different types of enquiry that will help them to answer scientific questions about the world around them.
- Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

As well as these, Little Eaton Primary School aims to:

- Enable children to make decisions about the uses and values of scientific work and achievements.
- Enable children to develop an understanding and respect for the natural world.
- Enable children to question, hypothesise, test and discover for themselves about our world.
- Develop the skills required to investigate the world around them.

We aim to develop positive attitudes to Science by:

- Building on a child's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and responsibility.
- Building a child's self-confidence to enable them to work independently.
- Developing a child's social skills to work cooperatively with others.
- Providing our children with an enjoyable experience of science, so that they will develop a deep and lasting interest and may be motivated to study science further.

Implementation:

Teaching and planning of Science in EYFS

- Continuous provision and play underpins the delivery of all the EYFS.
- In playing, children behave in different ways: sometimes within their play, they may describe and discuss what they are doing and sometimes they may be more reflective and quieter as they play.
- Within a secure and challenging environment with effective support, children can explore, develop and experiment as they play to help them make sense of the world.
- The EYFS strand 'Understanding the World' leads directly to scientific elements of the curriculum and leads to more formalised Science learning in KS1 and then KS2.

Teaching and planning of Science in KS1 and KS2

- The areas of study are outlined by the National Curriculum and these have been divided and allocated to Year groups, with specific content to cover. These are outlined on a long-term plan, allowing an overview of the progression of Science teaching throughout the school.
- At Little Eaton Primary School, teachers use a range of schemes and resources to plan for Science, ensuring we deliver the full range of the Primary National Curriculum 2014.
- Activities should be planned to meet the needs of all children.
- Differentiation is achieved through careful planning and organisation.
- Differentiation enables all children to engage in the curriculum by providing learning tasks and activities that are tailored to their needs and abilities. Learners should be supported and challenged to progress.
- Little Eaton Primary School looks to integrate practical Science in most lessons, making learning engaging and fun.
- Lessons are planned to encourage children to predict, hypothesise, collect evidence, analyse and question the results they gather and evaluate what they have learnt.
- Children are encouraged to work in groups or individually where appropriate. In group work, children are given a role to fulfil, in order to give their own work a purpose and a focus.
- Children are taught to use a variety of means for communicating and recording their work.
- Where possible, science knowledge and skills are integrated into classes ongoing 'topic' work to provide more contextual and meaningful learning experiences. Including:
 - English: opportunities to write for varied purposes, with the characteristics of different kinds of writing. For example, chronological reports, recounts, balance arguments, biographies and note taking
 - Mathematics: developing skills in data handling, measurements and mathematical relationships
 - Art: understanding of materials and their properties, designing and creating own inventions
 - Geography: exploring the physical processes of the natural world.
 - History: researching Scientists, their discoveries and the impact in today's society
 - Computing: data handling and research
 - PSHE: health and safety education

Recording in Science

- The way in which Science is recorded will vary across the school depending on age and ability.
- Teachers should ensure that a range of appropriate methods are used. These may include:
 - Written accounts including: instructions, reports and explanations
 - Diagrams, drawings and pictures
 - Annotated diagrams
 - Spreadsheets (data collection)
 - Charts, graphs and tables
 - Model making

Safety

- Children are encouraged to consider their own safety and the safety of others at all times.
- Teachers will provide a safe and secure environment for children to learn.
- Any experiments or trips which are considered a particular risk will need a Risk Assessment Form to be completed and to consult the Science Co-ordinator and relevant SLT members in advance of the activity.

Resources

- The children are encouraged to use a wide range of resources to support their work.
- Most equipment is stored in a central resource area, although each class has a supply of regularly used items.
- All children are given regular instruction in the safe and considerate use of resources.

Inclusion

At Little Eaton Primary School all children have access to Science lessons and activities regardless of age, sex, or ability. Teaching approaches provide equality of opportunity by making sure the work is suitable for all pupils, considering religious and cultural beliefs and enabling those with disabilities to have full participation. Children are encouraged to work individually, in pairs, small groups and as whole class when required.

Equality

This policy has been written with reference to and in consideration of the school's Disability Equality Scheme. Assessment will include consideration of issues identified by the involvement of disabled children, staff and parents and any information the school holds on disabled children, staff, and parents.

Impact:

Monitoring, Record Keeping and Assessment.

- Teachers will assess a child's Science work in a variety of ways to ensure they gain a full understanding of what each child has learnt, and what is needed to progress their understanding.
- Teachers will observe, provide written and oral feedback.
- Samples of work are moderated throughout the year.

Achievement in science is celebrated by:

- Displaying work
- Communicating findings in class to others.
- Presenting of achievement certificates in achievement assembly.
- Celebrating the British Science Week.

Subject leader role

The Science subject lead is responsible for raising the standards of teaching and learning in Science. This will include:

- Overseeing the design and delivery of the Science curriculum.
- Developing good practice in their classroom.
- Bid for funding to maintain resources
- Co-ordinating and ordering resources and managing the budget.
- Monitoring and evaluating resources.
- Monitoring planning and the delivery of the curriculum.
- Working together with colleagues to raise standards.
- Providing stimulus and inspiration.
- Ensuring that the policy documents remain useful and current.
- Yearly audit and action plan.
- Conducting pupil voice.

Any questions or concerns regarding this policy should be made to Mr. K Thomasson (Science Subject Leader).

Confirmation that the policy for Science, in respect of Little Eaton Primary School, has been discussed, approved and ratified by the Governing Body:

Signed by:

Governors: Date:

Headteacher: Date:

Next Review date:.....