



Grove Lea
Primary School

Science Policy

Introduction

Science is a core subject in the National Curriculum. We believe that a high-quality science education provides the foundations for understanding the world and how it works. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught the essential aspects of the knowledge, methods, processes and uses of science. Pupils should be encouraged to recognise 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 analyse causes. The implementation of this policy is the responsibility of all teaching staff.

Aims

Our policy aims to ensure that all pupils at Grove Lea Primary

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- Encourage children to work scientifically.
- To encourage children to work curiosity, collaboratively, courageously and carefully.
- Encourage the development of positive attitudes to Science.
- Deliver the Science Programmes of Study of the National Curriculum.
- Help in developing and extending children's scientific concept of the world, and encourage them to ask deeper questions about the world building upon their natural curiosity.

- Develop the use of scientific language, recordings and techniques.
- Develop the skills of investigation including observing, measuring, predicting, experimenting, communicating, interpreting, explaining and evaluating.
- To promote learning through a wide variety of teaching and learning styles.
- Prepare our children for life in an increasingly scientific and technological world.

Objectives

- To develop pupils' enjoyment and interest in science and an appreciation of its contribution to all aspects of everyday life.
- To develop a knowledge and appreciation of the contribution made by famous scientists to our knowledge of the world including scientists from different cultures
- To encourage pupils to relate their scientific studies to applications and effects within the real world
- To develop a knowledge of the science contained within the programmes of study of the National Curriculum.
- To develop in pupils a general sense of enquiry which encourages them to question and make suggestions
- To encourage pupils to predict the likely outcome of their investigations and practical activities
- To provide pupils with a range of specific investigations and practical work which gives them a worth-while experience to develop their understanding of science
- To develop progressively pupils' ability to plan, carry out and evaluate simple scientific investigations and to appreciate the meaning of a 'fair test'.
- To introduce pupils to the language and vocabulary of science
- To give pupils regular opportunities to use the scientific terms necessary To communicate ideas about science
- To develop pupils' basic practical skills and their ability to make accurate and appropriate measurements
- within practical activities give pupils opportunities to use a range of simple scientific measuring instruments such as thermometers and force meters and develop their skill in being able to read them.
- To give pupils opportunities to use ICT (video, digital camera, data logger) to record their work and to store results for future retrieval throughout their science studies
- To give pupils the chance to obtain information using the internet.

Working Scientifically

Working scientifically is a key skill which is integral to the learning and development of primary science. These key skills should be embedded throughout the children's learning opportunities.

Entitlement

All children at Grove Lea Primary will be given the opportunity to develop their science knowledge, skills and understanding. We value Science as a vehicle for the development of language skills, and we encourage our children to talk constructively about their Science experiences. We work to ensure that all children have the opportunity to gain scientific knowledge and understanding regardless of gender, race, class, physical or intellectual ability. We will ensure that expectations do not limit pupils' achievements, supporting where there is a need and extending children who need further challenging. Gender and cultural differences will be reflected positively in the teaching materials used.

Implementation

Scientific teaching and learning opportunities are identified within topics in the long term planning for the whole school. Class teachers are responsible for planning and ensuring all children's needs are met.

Assessment

The school will follow the National Curriculum, will be used to support teachers in breaking down the Key Skills. The Science Leader will share an overview of topics linked to Target Tracker statements to enable class teachers to assess children in their class. Teachers will then make a judgement on their children's attainment at the end of each academic year against age-related expectations. This will be formally recorded on Target Tracker. Children's assessments are reported to parents and governors (*also see marking policy).

Recording Achievements

Children's work will be assessed and celebrated and then recorded with the school tracking system termly. Work will be photographed or recorded and filed in children's science books. Work will be displayed regularly both in class displays and whole school displays.

Health and Safety

Pupils will be taught to use scientific equipment safely when using it during practical activities. Class Teachers and Teaching Assistants will check equipment regularly and report any damage, taking defective equipment out of action. Risk assessments for equipment and procedures are completed. Refer to Health and Safety Policy.

Early Years Foundation Stage

In the EYFS science is taught through a specific area of learning, which is Understanding of the world. Carefully planned activities based on children's needs and interests allow them to observe things closely for patterns and change and to use simple equipment like magnifying glasses and magnets. Children are encouraged to take part in experiments like melting chocolate and mixing colours. Our aim is to build the foundations for scientific knowledge, understanding, skills and a curiosity to wonder how and why about the world they live in. (*see EYFS policy for more detailed information).