

GREENSLADE PRIMARY SCHOOL SCIENCE POLICY

Introduction

This document is a statement of the aims, principles and strategies for the teaching and learning of science at Greenslade Primary School.

What is Science?

Science is a process whereby children make sense of the world in which they live in a logical and coherent way. It involves children in the skills of observation, questioning, hypothesizing, setting up fair tests, and the collection and interpretation of results.

Aims

Teachers at Greenslade Primary School share the following aims:

- To provide equal access to the science curriculum for all children, through careful planning and being sensitive to the abilities and needs of the individual.
- We are committed to high achievement, regardless of gender, race, social background or disability. This is in line with the school's Equal Opportunities Policy.
- To develop in our pupils an enthusiasm for scientific enquiry .
- To ensure that children gain a sense of enjoyment and satisfaction from solving real problems, and see themselves as scientists.
- To deliver the National Curriculum for Science effectively, building on the children's existing scientific understanding and experience.
- To raise standards of achievement through planned and structured investigative work, based on explicit teaching of the appropriate skills.
- To stimulate and excite children's curiosity through first hand experience and observation whenever possible.
- To ensure that there is continuity and progression throughout the school.

- To be aware of the varied social and cultural backgrounds when planning.
- For the children to acquire and use scientific vocabulary when communicating their ideas orally and in written work.
- To provide opportunities for children to become increasingly independent in their approach to problem solving in science.
- To ensure that children with special needs are able to take part in scientific experiences.
- To prepare children for life in an increasingly scientific and technological world.
- To foster concern about, and an appreciation of our environment.
- To develop an understanding in children of risk assessment and safety.
- To help children develop a caring attitude to living things.

Principles for the Teaching and Learning of Science

Science is a core subject of the National Curriculum and teachers following the recommended QCA guidelines with regard to time allocation when planning.

All lessons have clear learning objectives, which are shared and reviewed with the pupils effectively.

We strive to ensure that lessons make effective links with other curriculum areas and subjects, especially literacy, numeracy and ICT and the use of electronic equipment for observing and recording.

In the Early Years Foundation Stage there are seven areas of learning and development that are inter-connected. The level of progress children should be expected to have attained by the end of the EYFS is defined by the early learning goals.

Pupils in the EYFS develop their knowledge, understanding and skills through well-planned provision, both inside and outdoors. We aim to provide opportunities for development through both adult-led activities and child initiated learning.

Activities inspire pupils to experiment, investigate the world around them and raise their own questions such as “Why...?”, “How...?” and “What happens if...?”. Activities develop the skills of enquiry, observation, locating sources of information, selecting appropriate equipment and using it safely, measuring accurately and checking results, making comparisons and communicating results and findings in a range of ways.

The School Development Plan and the Science Action Plan have outlined the professional development of staff.

Science is planned using:

- The teacher’s skill, knowledge, understanding and professional judgment of the children in their class.
- The Programmes of Study, which are taught through the QCA units. These are planned out over the year groups, using the School’s Curriculum Map.
- Additional resources, in the form of Nuffield teachers’ and pupils’ books.
- Outside organisations such as the Environmental Curriculum Centre and the Townsend Residential Centre and Margaret McMillan Centre at Wrotham.
- A range of educational packs and resources, which are stored centrally.

Assessment

Assessments in science arise from teacher observations of, and interactions with, children working in practical situations and from evidence in children’s workbooks. A variety of strategies, including observation, questioning, discussion, concept mapping and marking are used as appropriate. A set of activities (assessment lessons) is available for each unit, for staff to use to support their observations.

Assessments are recorded on APP grids (one for each child in Key Stage One and six per class in Key Stage Two) at the end of each unit.

Management of the subject

The science leader will:

- Monitor the quality of teaching and learning in science through work scrutiny, moderation of assessments, learning walks
- Advise and support staff in the planning, delivery and assessment of science
- Manage and develop science resources through the strategic deployment of the science budget
- Monitor the science curriculum and policy in practice
- Attend courses and disseminate this information to all staff through planned INSET and informal conferencing.

Organisation of resources

Science equipment is stored centrally. Equipment is available to support the National Curriculum QCA science units.

Consumable items such as batteries are sourced through the central stock and not through the dedicated science budget.

Reviewed - February 2016

Next Review - February 2018