



William Fletcher Primary School

Science Policy

William Fletcher School is a Rights Respecting School, this policy reflects Articles 17 (access to information) 24 (access to health education) 28 (right to education) 29 (goals of education)

Science aims to stimulate a child's curiosity in finding out why things happen in the way they do. It teaches methods of enquiry and investigation to stimulate creative thought. Children learn to ask questions and begin to understand the world in which they live and how science affects their lives.

Aims

- * Help develop enquiring minds.
- * Develop scientific knowledge and conceptual understanding of their world, through the specific disciplines of biology, chemistry and physics.
- * Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them answer scientific questions about the world around them.
- * Ensure that pupils are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.
- * Evaluate evidence and present their conclusions clearly and accurately.
- * Work carefully and safely.

Teaching and learning

We use a variety of teaching and learning styles in science. Our principal aim is to develop children's knowledge, skills and conceptual understanding. We aim to teach scientific enquiry through whole class teaching and practical activities. Children are encouraged to use a variety of data, including graphs, diagrams, photographs and statistics. Where appropriate, children use ICT in science lessons to enhance their learning.

To cater for children of different abilities, we ensure that we provide suitable learning opportunities for all. We provide learning opportunities that are matched to the needs of children with learning difficulties, taking into account the targets in children's IEPs. We aim to be proactive in identifying learning opportunities that will challenge our more able children. Children are taught to observe the rules of safety. Materials and equipment need to be handled sensibly.

Teachers are aware of the contents of the document **Be Safe** published by the Association for Science Education which has been adopted by the county as its Science Safety policy. A copy of the document is kept in the staff room. Science curriculum planning

The school uses the national curriculum as the basis of its scheme of work for

science. The scheme of work is organised into a two year rolling programme, where every child visits the same knowledge areas of the curriculum in any academic year, covering the content that is suitable for their age and stage. This ensures that children will not miss or repeat any area of the curriculum.

The science curriculum areas are as follows:

Cycle A

Ourselves and other animals, Habitats (Biology)

Changing materials (Chemistry)

Light and Sound (Physics)

Cycle B

Plants, Keeping fit and healthy (Biology)

Properties of materials (Chemistry)

Electricity, Forces and movement (Physics)

Curriculum planning in science is reflected in long- and medium term plans. Long term planning maps scientific topics studied in each term during the key stage. Science is taught both as a discrete subject as well as through cross curricular links where appropriate.

Medium plans detail each unit of work for each term. The science coordinator keeps and reviews these plans.

Foundation stage

Science is taught in the FS as an integral part of the topic work covered during the year. Through play and exploration, active learning, creating and thinking critically, children begin to understand the world about them. Children work towards the Early Learning Goals in Development matters in the Early Years Foundation Stage. Children know about similarities and differences in relation to places, objects, materials and living things. They talk about features of their own environment and how these vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes. Foundation stage children visit Forest School, exploring the natural world around them.

Vocabulary

Children are taught and encouraged to use scientific and technical vocabulary specific to the area of study.

Assessment

We assess children's work in science by making informed judgments as we observe them during lessons. On completion of a piece of work, the teacher marks the work in line with the school's marking policy.

Each child in the school has a science ladder that is linked to the national curriculum and details objectives they will cover within each topic. When a child achieves an objective their class teacher highlights it with a green pen. Science ladders are kept in the back of the children's science books providing

easy access for teachers and parents.

In line with the EYFS framework, children in Foundation stage have a science learning ladder linked to the age related learning and development goals. These ladders can be found in the children's EYFS folders.

To support Assessment for Learning, Years 1-6 have access to Concept Cartoons, a strategy that helps to elicit learners' ideas, challenge their ideas and support learners in developing their understanding.

Resources

We have resources for all science teaching units in the school. We keep these in the science resource cupboard, where there are clearly labeled boxes and trays. Both Key Stage libraries contain a good supply of science topic books. Computer software is used to support children's individual research.

Policy Name	Science Policy
Frequency of review	3 years
Reviewed	January 2017
Reviewed by	Kelly Parsons - Science Co-ordinator and staff team
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