Christ Church (C of E) Primary School
Science Policy

Co-ordinator: Daniel Heron
Summer 2015

Aims and Objectives.

- To encourage the children to work and think scientifically.
- To stimulate the child's interest in science.
- To provide a variety of scientific experiences which are realistic and relevant to the child's future.
- To provide opportunities for a child to fulfil their scientific potential.
- To develop each child's understanding of scientific concepts and their ability to apply them in everyday contexts.
- To facilitate an inquisitive and motivated approach to science through discussion, investigation and active learning.

Organisation.

Planning in Years 1 to 6 is based around the new science curriculum. Many other resources are used to enrich teaching.

Foundation Stage.

Science in the Reception class is taught as an integral part of the topic work covered during the year. The Foundation stage curriculum in based around the Six Areas of Learning set out in the Early Learning Goals. There is scientific content within the learning area Knowledge and Understanding of the World.

The contribution of science to teaching in other curriculum areas.

Literacy:
Science contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. Some of the texts that the children study in the Literacy Hour are of a scientific nature. The children develop oral skills in science lessons through discussions (for example of the environment) and through recounting their observations of scientific experiments. They develop their writing skills through writing reports and projects and by recording information.

Numeracy:
Science contributes to the teaching of mathematics in a number of ways. The children use weights and measures and learn to use and apply number. Through working on investigations they learn to estimate and predict. They develop the skills of accurate observation and recording of events. They use numbers in many of their answers and conclusions.

ICT:
Children use ICT in science lessons where appropriate. They use it to support their work in science by learning how to find, select, and analyse information on the Internet and on CD-ROMs. Children use ICT to record, present and interpret data and to review, modify and evaluate their work and improve its presentation.

PSHE:
Science makes a significant contribution to the teaching of personal, social and health education. This is mainly in two areas. Firstly, the subject matter lends itself to raising matters of citizenship and social welfare. For example, children study the way people recycle material and how environments are changed for better or worse. Secondly, children benefit from the nature of the subject in that it gives them opportunities to take part in debates and discussions. They organize campaigns on matters of concern to them, such as helping the poor or homeless. Science promotes the concept of positive citizenship.

Spiritual, moral, social and cultural development
Science teaching offers children many opportunities to examine some of the fundamental questions in life, for example, the evolution of living things and how the world was created. Through many of the amazing processes that affect living things, children develop a sense of awe and wonder regarding the nature of our world. Science raises many social and moral questions. Through the teaching of science, children have the opportunity to discuss, for example, the effects of smoking and the moral questions involved in this issue. We give them the chance to reflect on the way people care for the planet and how science can contribute to the way we manage the earth's resources. Science teaches children about the reasons why people are different and, by developing the children's knowledge and understanding of physical and environmental factors, it promotes respect for other people.

Equal Opportunities / Special Educational Needs / Gifted and Talented.

The school equal opportunities policy clarifies the way in which we at Christ Church strive to ensure the equal provision for all children regardless of their gender, race, religion, class or ability.
We achieve these goals in Science by:

- Involving all of the children in oral work

- Planning differentiated work to suit the ability of the children
- Allowing access to materials and equipment
- Ensuring that course content is relevant to all pupils
- Having high expectations of every child
- Ensuring examples are free from stereotyping.

Assessment and recording

At Christ Church, monitoring is very much a part of the ethos of our learning. We monitor to reflect on current practice, collect evidence of children's learning, see in practice the progression and continuity throughout the school, see which resources are being widely used and which resources we would like to be using. The monitoring 'outcome' is to embrace the strengths of individual classes, identify needs, and as a school, set targets to aim for which will maintain, and where possible improve current standards and practices.

We are currently using the North Tyneside NTAGs for our assessment. These run alongside teacher assessment.

Resources

A variety of scientific resources are available in school. A few of these resources are classroom based; however the majority are stored in a central location in the school staff room. The co-ordinator monitors these resources and replenishes them as necessary.

Topic Matrix (2015)

Year	Autumn	Spring	Summer
Reception	Ourselves. Mini Beasts.	Magnets and springs. Growth and plants.	Plants growth (Farm)
Year 1	Plants and seasonal change. Materials.	Light. Animals.	Working scientifically. Seasonal change.
Year 2	Materials. Living things and their habitats.	Living things and their habitats. Animals including Humans.	Plants.
Year 3	Animals including Humans. Forces & Magnets.	Rocks. Plants.	Light.
Year 4/5	Animals. Living things in their habitats & food chains.	Sound. Animals including humans (Digestion & teeth)	States of matter. Electricity.
Year 5/6	Adaptation & Independence. Micro-organisms.	Dissolving Reversible/irreversible. Changes.	Electricity. Forces.