

Kirk Smeaton CE Primary School
Science Policy



Reviewed: January 2017 To be reviewed: January 2019

1. Our rationale for teaching science

Science stimulates and excites pupils' curiosity about phenomena and events in the world around them. It also satisfies this curiosity with knowledge. Scientific method is about developing and evaluating explanations through experimental evidence and modelling. Through science, pupils understand how major scientific ideas contribute to technological change- impacting on industry, business and medicine and improving quality of life. They learn to question and discuss science-based issues that may affect their own lives, the direction of society and the future of the world.

We believe that a broad and balanced science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability.

Our aims in teaching science include the following.

- Preparing our children for life in an increasingly scientific and technological world.
- Fostering concern about, and active care for, our environment.
- Helping our children acquire a growing understanding of scientific ideas.
- Helping develop and extend our children's scientific concept of their world.
- Developing our children's understanding of the international and collaborative nature of science.
- Encouraging the development of positive attitudes to science.
- Building on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and responsibility.
- Building our children's self-confidence to enable them to work independently.
- Developing our children'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.
- Giving our children an understanding of scientific processes.
- Helping our children to acquire practical scientific skills.
- Developing the skills of investigation - including observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Developing the use of scientific language, recording and techniques.
- Developing the use of ICT in investigating and recording.
- Enabling our children to become effective communicators of scientific ideas, facts and data.

2. Aims

- To deliver the Science Programmes of Study of the 2014 National Curriculum and meet the Early Learning Goal which focuses on Understanding the World.
- To ensure that science lessons are imaginative, purposeful, well managed and enjoyable.
- To make links between science and other subjects.

3. Structure

- Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of National Curriculum Science and science in the Foundation stage. Science teaching in the school is about excellence and enjoyment. We adapt and extend the curriculum to match the unique

circumstances of our school.

- Foundation stage, science is taught in the main through continuous provision with planned resources and directed open questions
- KS1 and KS2 teachers at this school teach science through a combination of discrete science lessons, and a thematic approach. KS2 science is sometimes taught during maths lessons, for example data handling aspects of science.
- Science will usually be taught by the class teacher.

4. Science is taught within the guidelines of the school's inclusion policy.

- We ensure that all our children have the opportunity to gain science knowledge and understanding regardless of gender, race, class, physical or intellectual ability.
- Our expectations do not limit pupil achievement and assessment does not involve cultural, social, linguistic or gender bias.
- We aim to teach science in a broad global and historical context, using the widest possible perspective and including the contributions of people of many different backgrounds.
- 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 recognise the particular importance of first-hand experience for motivating children with learning difficulties.
- We recognise that science may strongly engage our gifted and talented children, and we aim to challenge and extend them.
- We exploit science's special contribution to children's developing creativity; we develop this by asking and encouraging challenging questions and encouraging original thinking.

5. Assessment and recording in science

- Themes commonly begin with an assessment of what children already know.
- We assess for learning (AfL). Children are involved in the process of self-improvement, recognising their achievements and acknowledging where they could improve.
- We mark each piece of work positively, making it clear verbally, or on paper, where the work is good, and how it could be further improved. Assessment records are reviewed annually.
- We have a tracking system to follow and accelerate children's progress. The school science coordinator monitors progress through the school by sampling children's work at regular intervals.
- The school makes continuous assessment of children's work, much of which is informal. This assessment is used to inform teaching throughout the school.
- Year 2 and Year 6 teacher assessments will be reported externally, in line with the Interim Arrangements for 2016-2017.
- Reports to parents are made verbally each term, and written once a year, describing each child's attitude to science, his/her progress in scientific enquiry and understanding of the content of science.

6. Health & Safety

For guidance there is a copy of 'Be Safe' published by ASE Education. Risk assessments will be carried out for any activities which are outside the usual remit of primary school science.