



Science Policy

Introduction

At Churchfields Primary, we are continuously looking at ways in which we can improve the inclusive provision for our children to ensure that our children meet their potential and achieve at school and live up to the school motto of being the best that they can be.

This policy outlines the teaching, organisation and management of science taught at Churchfields Primary School. The school's policy for science is based on the primary curriculum, 2014. The implementation of this policy is the responsibility of all teaching staff.

Teaching Science

At Churchfields, we believe that the best science teaching fosters and develops pupils' curiosity in the subject whilst also helping them to fulfill their potential. For our pupils to achieve well in science, they need to acquire the necessary scientific knowledge and also be able to enjoy the experience of engaging and purposeful scientific enquiry in order to help them to answer scientific questions about the world around them.

The National Curriculum 2014 states why we teach science in schools: 'A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics...Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.'

Aims

Through high-quality science teaching, we aim to help our pupils understand how major scientific ideas have played a vital role in society. Moreover, we aim to prepare our pupils for life in an increasingly scientific and technological world. We aim to do this by:

- Delivering high quality, interesting and engaging science lessons;
- Using scientific contexts to develop and consolidate cross curricular skills in English, Maths and ICT;
- Teaching science in a global and historical context; including the contributions significant scientists from a range of cultures;
- Developing and extending pupils' scientific knowledge and understanding;
- Developing pupils' ability to work scientifically and involve pupils in planning, carrying out and evaluating investigations;
- Developing pupils' scientific vocabulary and ability to articulate scientific concepts clearly and precisely;
- Ensuring that all pupils are appropriately challenged to make good progress in science.

Teaching and Learning

At Churchfields, teachers plan and deliver high-quality and engaging science lessons incorporating a range of teaching and learning styles. Opportunities are provided for pupils to:

- Learn about science, where possible, through first hand practical experiences;
- Develop their research skills through the appropriate use of secondary sources;
- Work collaboratively in pairs, groups and/or individually;
- Plan and carry out investigations with an increasing systematic approach as they progress through the school;
- Develop their questioning, predicting, observing, measuring and interpreting skills;

- Record their work in a variety of ways e.g. writing, diagrams, graphs, tables;
- Read and spell scientific vocabulary appropriate for their age.
- Be supported in their learning by science displays, which include key vocabulary and relevant questions and information.

Planning

Science in the Early Years Foundation Stage is planned using the Early Years Curriculum 'Understanding of the World'.

Key Stage 1 and 2 teachers plan science lessons using the National Curriculum (2014).

All science lessons have focused learning objectives, clear differentiation and success criteria to ensure that pupils make at least good progress.

'Working scientifically' is embedded throughout the areas of learning in key stage 1 and 2; this focuses on the key aspects of scientific enquiry which enable pupils to investigate and answer scientific questions.

Areas of learning within key stage 1 and 2 ensure that statutory requirements are being covered through the specific disciplines of biology, chemistry and physics (teachers may also refer to the non-statutory guidance which provide additional support).

Monitoring

Science is monitored by the science leader as part of the whole school monitoring process. Planning and book scrutiny are carried out regularly by the science subject leader and feedback is given to teachers at an appropriate time.

Health and safety

Teachers must plan safe activities for science and complete a risk assessment if necessary. Teachers and learning support assistants need to be aware of health and safety procedures when using equipment/food in science lessons. Pupils must be aware of the need for personal safety and the safety of others during science lessons.

Inclusion

At Churchfields, teachers ensure that they adopt an inclusive approach to their science planning and teaching; ensuring that pupils of all abilities and backgrounds have an equal opportunity to make good progress and enjoy science.

Impact

Through the teaching of Science, children gain a knowledge and awareness of the world around them. By regularly timetabling science each week, the pupils' achievement can progress and be regularly monitored and assessed. Impact can be measured through assessments, monitoring activities and teacher evaluations. STEM Week also helps to raise the subject's profile within the School.

Resources

The science leader is available for support where needed. Resources are stored in the Science cupboard located upstairs by the year 6 classroom. Useful websites including video clips are incorporated into lessons through the use of the Interactive Whiteboard. The subject leader must be informed of any changes regarding science resources i.e. missing or broken resources and/or when new or replacement resources are required.

Assessment and Record Keeping

Achievements are recorded using a wide variety of methods providing all children with an opportunity to demonstrate their knowledge and understanding. In Reception all work is directly linked to the EYFS curriculum. All work in KS1 and KS2 is directly linked to the NC14 scheme of work.