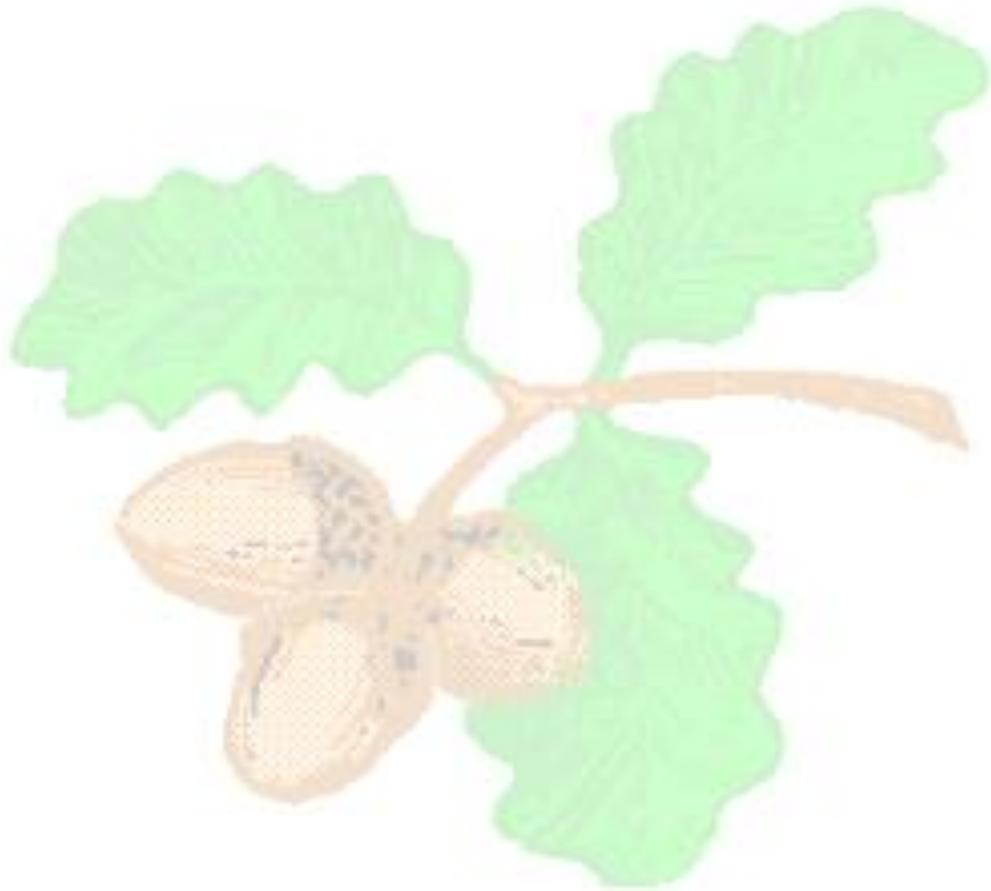


**CHURCHFIELDS INFANTS' SCHOOL.
NURSERY UNIT
& LANGUAGE FACILITY**



**SCIENCE
POLICY**

**CHURCHFIELDS INFANTS' SCHOOL,
NURSERY UNIT AND LANGUAGE FACILITY**

SCIENCE POLICY

Curriculum

Early Years Foundation Stage

“Every child is a **unique child**, who is constantly learning and can be resilient, capable, confident and self- assured”

Understanding the World involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment

[EYFS \(revised 2014\)](#)

Key Stage 1

A high quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world’s future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. 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. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

[National Curriculum Science \(revised 2014\)](#)

Aims

Early Years Foundation Stage

We recognise each pupil as a **unique child** who reaches out to relate to people and things through the **Characteristics of Effective Learning**, which move through all areas of learning.

- Playing and exploring – engagement with their environment through finding out and exploring; playing with what they know; being willing to ‘have a go’
- Active learning – motivation, demonstrated through being involved and concentrating; keeping trying; ‘enjoying achieving what they set out to do’
- Creating and thinking critically – thinking, characterised by having their own ideas; making links; choosing ways to do things

Children learn and develop well in **enabling environments**, in which their experiences respond to their individual needs and there is a strong partnership between practitioners and parents and carers. We aim to provide enabling environments which value all people, value learning; and which offer stimulating resources, relevant to all the children’s cultures and communities; rich learning opportunities through play and playful teaching and support for children to take risks and explore.

Key Stage 1

We will teach the national curriculum for science, which aims to ensure that all pupils:

- develop **scientific knowledge and conceptual understanding** 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 to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.

During years 1 and 2, pupils will be taught to use the following practical scientific methods, processes and skills through the teaching content:

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions

Attainment

Early Years Foundation Stage

Early Learning Goal: Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

Key Stage 1

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant content.

Year 1	Year 2
Plants	Plants
Animals, including humans	Animals, including humans
Everyday materials	Uses of everyday materials
Seasonal changes	Living things and their habitats

Equal Opportunities and Inclusion

Teachers are responsible for providing experiences and activities that encourage full and active participation by all children, irrespective of ability, gender, race or religion.

Teachers should set high expectations for every pupil. They should plan stretching work for pupils whose attainment is significantly above the expected standard. They have an even greater obligation to plan lessons for pupils who have low levels of prior attainment or come from disadvantaged backgrounds. Teachers should use appropriate assessment to set targets which are deliberately ambitious. Teachers should take account of their duties under equal opportunities legislation that covers race, disability, sex, religion or belief and other areas.

Special Educational Needs and Disabilities (SEND)

A wide range of pupils have SEND. Lessons should be planned to ensure that there are no barriers to every pupil achieving. In many cases, such planning will mean that these pupils will be able to study the full national curriculum. The [Special Educational Needs and Disability Code of Practice](#) includes advice on approaches to identification of need which can support this. A minority of pupils will need access to specialist equipment and different approaches. Teachers will refer to the SEN and Disability Code of Practice to be clear about what should be done to meet their pupils' needs, in teaching, learning and assessment.

English as an Additional Language (EAL)

Teachers must also take account of the needs of pupils whose first language is not English. Monitoring of progress should take account of the pupil's age, length of time in this country, previous educational experience and ability in other languages. The ability of pupils for whom English is an additional language to take part in the national curriculum may be in advance of their communication skills in English. Teachers should plan teaching opportunities to help pupils develop their English and should aim to provide the support pupils need to take part in science as in all subjects.

Health and Safety

It is the teacher's responsibility to provide a safe environment, inside or outside the classroom, for children to carry out practical activities. The school follows guidelines detailed in the latest "Be Safe" published by the Association for Science Education. A copy is kept centrally with the School's Health and Safety Policy and it is the responsibility of **all staff members** to read and abide by the guidance provided.



Resources

The Science Co-ordinator is responsible for maintaining an adequate supply of resources. Resources are stored centrally. It is the responsibility of all staff to make sure that items of

equipment are returned to their correct places in the resource area. Computer software and internet resources are used for reference material and to support recording in Science. The school grounds provide a valuable resource to develop scientific skills, especially for scientific enquiry and life processes and living things. Visits to local nature reserves, farms and the forest can be used by to support work in Science.

Assessment and Reporting

We use assessment to inform and develop our teaching. We give feedback verbally and mark work in line with the school's marking policy.

Assessment records are completed by teachers and passed on as children move through the school so that children's progress is tracked.

Staff assess children's level of attainment at the end of KS1. This teacher assessment is based on assessment records and work samples.

Reporting to parents is carried out in line with the school reporting procedures.

Monitoring and Evaluation

The Science Co-ordinator is responsible for monitoring the implementation of the Policy as deemed appropriate, by: monitoring planning, to ensure it reflects the subject content; monitoring lessons and giving feedback to the teacher; discussing standards with the Headteacher and SLT.

