

HIGHFIELD PRIMARY SCHOOL

POLICY FOR SCIENCE

Approved June 2019

This document is a statement of the aims, principles and strategies for the teaching and learning of science at Highfield Primary School.

PURPOSE OF STUDY – Why teach science?

Children are naturally curious. Science education nurtures this curiosity and allows them to ask questions and develop the skills they need to answer questions about the world in which they live. All pupils should be given the opportunities to learn how science works and discover why science matters in the world.

AIMS

- to develop pupils' **enjoyment and interest** in science and an appreciation of its contribution to all aspects of everyday life and society
- to use a planned range of **enquiries** to help pupils answer scientific questions and gain a greater understanding of the concepts and knowledge of science
- to develop pupils' **practical and investigative skills**
- to develop pupils' understanding and use of **scientific language and vocabulary**
- to develop pupils' use of '**key skills**' (including mathematical, English and computing skills) in their science studies.
- to extend the learning environment for our pupils via our **outdoor learning areas** and the locality
- to promote a '**healthy lifestyle**' in our pupils.
- To promote pupils' '**eco-awareness**'

TEACHING AND LEARNING

- Science is taught from Reception to Year 6.
- In **Foundation Stage**, science forms the basis of one of the seven areas of learning.
- **The National Curriculum 2014 Primary Framework** is used as a basis for planning and teaching of the subject in key stages 1 and 2. It is supported with the use other schemes and resources.
- Science is taught both as a **discreet subject** and through **cross curricular activities** where appropriate.
- The **key learning intention and success criteria** are shared with pupils in each lesson.
- Pupils are given opportunities to develop their **scientific vocabulary** and articulate their scientific concepts both orally and in written form. Pupils are taught to read and spell scientific vocabulary at a level consistent with their developing reading and spelling. The relevant scientific vocabulary to

be learnt and used in each year group has been identified on the School's 'Provision Map for Science' (see appendix).

- Lessons include a **balance** between **practical experiences and knowledge learning**.
- Opportunities to '**work scientifically**' are embedded within the content of science lessons and are highlighted on the School's Provision Map for Science (see appendix).
- Within each unit of work children have the opportunities to engage with different types of **scientific enquiry** as follows:
 1. observing changes over time
 2. pattern seeking
 3. identifying, classifying and grouping
 4. comparative and fair testing
 5. research using secondary sources

ASSESSMENT

- In the **Foundation Stage** children's knowledge and understanding is assessed according to the EYFS Learning and Development Stages. Learning may be evidenced using photographs of the children working scientifically and through simple recorded activities. Oral evidence is recorded by teachers during their observations.
- By the **end of Key Stage 1 and 2**, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study as set out in the National Curriculum 2014. Summative judgements at the end of each Key Stage are described as 'having met the expected standard' or 'not met the expected standard'.
- **Evaluations of children's learning** in science is made through observation, marking of pupil's work and a range of other specific assessment tasks.
- **Reports to parents** are written once a year, describing each child's attitude to science, his/her progress and understanding of the content of science and scientific enquiry.

ROLE OF THE SCIENCE LEADER

- **Monitor the teaching and learning** in science (termly) and provide support for staff when necessary.
- **Be an ambassador** and promote good science teaching and learning in the classroom and in outdoor areas.
- **Plan and lead INSET** in line with the SDP.
- To audit, organise and order necessary **resources**.
- Take a lead role in organising **science events** in school.
- Keep up to date with any **national / local science initiatives** and changes to the curriculum and assessment.

- Attend relevant **CPD courses** for science as appropriate in line with the School Development plan.
- Endeavour to ensure that **ALL pupils have access** to good science teaching.
- Endeavour to **involve parents/ carers** in their children's learning in and through science.
- Monitor **school website** content for science

INCLUSION and EQUALITY

- Children with **SEND** are supported by appropriate differentiation / modifications so that their science learning is accessible and meaningful.
- Children who are identified as demonstrating a particular aptitude in science, are given opportunity to extend their learning in class, and may have opportunity to work on challenges outside the classroom.
- We promote awareness, understanding and respect for diversity in our world, and challenge stereotypes. In science, this may be achieved through learning about the scientific and technological contributions of a range of people (including ability, ethnicity, religion, gender, sexuality and background).

HEALTH AND SAFETY

It is the teacher's responsibility to ensure that any investigations or practical science activities are carried out in a safe way. Pupils are taught the correct and safe use of equipment, as well as simple safety procedures.

Review

This policy will be reviewed annually by the science curriculum leader.