# Oakhurst Community First and Nursery School

## Science Policy

Reviewed: October 2018 by Mr R Webb

**Introduction**

Science is about children developing a sense of enquiry and extending their knowledge and understanding of the world around them through investigation and creativity. It is concerned with children exploring and questioning their surroundings to add to their growing knowledge of how their world is constructed. It will allow children to appreciate that Science will contribute and effect their futures in an ever changing and developing modern society and prepare them for life-long learning.

**Equal Opportunities Statement**

All children at Oakhurst, regardless of ethnicity, belief, gender, age or special needs, have the right to enjoy, progress and succeed within a broad, rich and balanced curriculum.

Our aim is to develop pupils' self-esteem, resilience, reciprocity and confidence. To place their skills, knowledge and understanding in the context of lifelong learning and to develop a greater understanding of the way in which this contributes to society and to their own community.

*For more specific guidance, please see the equal opportunities policy.*

**Aims**

- To build on children's natural curiosity and develop a scientific approach to science.
- To develop scientific skills which lead to pupils to learn as scientists.
- To develop an awareness of health and safety issues relating to the activities that the pupils undertake.
- To develop an understanding of the key concepts and use them in context.
- To recognise the cross curricular nature of science and to enhance the curriculum through links with other curriculum areas, where these links are appropriate.
- To build children's self-confidence, to enable them to work independently and develop their social skills to enable them to work co-operatively with others.

**Principles of Science**

- Children's curiosity is encouraged and valued; they are excited and enthusiastic when anticipating in their science lessons.
- Science is practical and hands on and children enjoy learning through exploration and questioning; they have the opportunity to use good quality resources.
- Enrichment events/school visits/workshops happen regularly.
- Progression of science skills is evident and taught throughout the school.
- Children confidently use accurate scientific vocabulary in context.
- Teachers use different assessment strategies during science lessons.
- All pupils are actively engaged in a science enquiry; using a variety of enquiry strategies, independently make decisions and answer their own questions.

**Skills**

Children are given opportunities to develop the following skills:

- Raising questions
- Predicting
- Fair testing
- Selecting / Using equipment
- Observing
- Measuring
- Gathering / Recording / Classifying
- Recognising / Explaining patterns / Utilising scientific vocabulary
- Presenting / Drawing Conclusions
- Evaluating / Using scientific evidence

**Safety**

Learning to work safely is of paramount importance when learning about science and safety is emphasised from the earliest stages. Safe scientific practice will ensure learners thrive and progress without the risks of danger. Staff should be familiar with the Association For Science Education document on safety in Science (Be Safe) particularly sections on using domestic chemicals, heating things, working with living organisms and using sharp instruments. Risk Assessments will be written and regularly reviewed to ensure optimum safety and to minimise risk of injury and illness.

**Science Curriculum Planning**

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of the National Curriculum. We carefully adapt and extend the curriculum to match the unique circumstances of our school.

The school teaches Science through a topic based approach. In all year groups, Science is a driver subject of the topics which ensures that the subject is high profile in our school. Content is taught carefully and thoroughly and is introduced in the phase areas set out in the National Curriculum: Key Stage 1 and Lower Key Stage 2 Scientific enquiry, known as 'Working Scientifically' in the 2014 National Curriculum. Nursery and Reception children are taught Science as set out in the renewed EYFS framework.

Throughout the Foundation Stage, and Key Stages 1 and 2 Science is a balance between hands-on practical activities/investigation and learning through secondary sources.

The Science curriculum is met through the long term planning of the connected curriculum which is carefully balanced to ensure full coverage of the National Curriculum.

The connective curriculum medium-term plans give details of each unit of work for each term.

**Computing in Science**

Information Communication Technology (ICT) is an integral part of Science and children should be given the opportunity to use ICT to extend and reinforce learning in Science. School desk-top computers, iPads and laptops are available for children to; research and answer their own enquires, record findings and present data.

*Please refer to the computing and E-Safety policies.*

**Assessment**

Assessment for Science is carried out in line with the school policy. Science assessments are carried out using both summative and formative assessment procedures. Formative assessments are made through observations in lessons. Summative assessment may take place at the end of each unit of work if the teacher deems necessary. Assessments are used to inform planning and teaching and learning. Written or verbal feedback is given to children regularly in line with school marking policy, to help guide learners' personal progress. Children are encouraged to make judgements about how they can improve their own learning. Teachers indicate progress using the school's Pupil Tracker (SPTO) for all Science objectives taught.

**Role of the Science Leader**

The Science Leader is responsible for monitoring the effectiveness of the teaching and learning of Science and the maintenance and replacement of scientific resources. The Science Leader should promote and celebrate the learning of Science throughout the school and beyond. The Science Leader will ensure safe practice and review risk assessments alongside senior members of staff. The Science Leader should look for opportunities for staff development to enhance the delivery of Science within the school. The Science Leader is responsible for reporting to the governing body and head teacher on standards within the subject area.

**Monitoring Teaching and Learning**

The monitoring of teaching and learning includes monitoring curriculum planning, classroom observations, work sampling and pupil interviews. The science governor is involved in monitoring Science annually.

**Linked policies**

This policy should be read in conjunction with other related school policies (list not exhaustive):

- PSHE Policy
- Teaching and Learning Policy
- Food Policy
- Computing Policy
- E-Safety Policy
- Marking Policy
- Assessment Policy
- Equal Opportunities Policy

**Dissemination**

This policy is to be publicised to all in the school community through:

- School website

**Approved**

Policy written: July 2017

Policy reviewed: October 2018

This policy was agreed by the Governing Body on 08/10/18