

# DALLIMORE PRIMARY & NURSERY SCHOOL

## SCIENCE POLICY

### Introduction

Science is important in all aspects of modern life. It stimulates and excites pupils' curiosity about natural phenomena, processes and events in the world around them. It also satisfies this curiosity with knowledge and understanding. Science engages learners at many levels, by linking ideas and concepts with practical experiences. Children can learn to question, discuss, predict, investigate and analyse the world in which they live, through the study of biology, chemistry and physics. They will discover the uses of science and how it is vital to the world's future.

### Aims

- To develop scientific knowledge and conceptual understanding
- To develop understanding of the nature, processes and methods of science through scientific enquiry.
- To equip children with scientific knowledge required to understand the uses and implications of science today and for the future.
- To build up a specialist vocabulary.
  
- To use initiative and perseverance when tackling problems, exploring new material, objects and situations
- To give children an understanding that science has both beneficial and harmful effects on our society and that there are social and moral implications to science.
- To develop in the children a caring and sensitive attitude towards living things and the environment.
- To encourage children to work co-operatively giving consideration to others and to learn, take an interest in and gain pleasure from science-based activities.

### Coverage of the National Curriculum and Assessment

Wherever possible KS1 has adopted a cross-curricular topic based approach to teaching science. In KS2 science is taught as a separate topic, but links to other subjects when possible. The children will be **working scientifically within these topics**. The National Curriculum has been used to create long/mediums term plans in our 'Dallimore Curriculum' to ensure full coverage of objectives over 2 year cycles.

Short term planning is done on a weekly basis with WALT titles providing clear objectives. Assessment is ongoing and informs planning.

At the end of every term, attainment is recorded on iTRACK to show the year group of each pupil and whether their scientific knowledge/skills for the topics covered are commencing, developing, secure, advanced or deep.

(Working scientifically will be updated every term.) This is used to help input an overall data entry at the end of the year.

The Foundation Stage will follow the Foundation Stage Profile.

### **Teaching and learning skills**

The aim of our teaching is, where possible, to base it on first-hand experience and scientific enquiry, so the children will be:

-observing, pattern seeking, identifying, classifying, grouping, comparing, testing, questioning, collecting data, analysing and presenting data.

In experimental work teachers will lead and guide a great deal during the early years and aim to withdraw more as the children develop their skills and knowledge, so allowing children to take the lead in planning and conducting experiments, becoming independent learners.

Written work is recorded in the pupils' Topic books.

### **Safety in science**

In order to avoid hazards which may occur during practical scientific tasks these steps are followed:

- Science is taught in a structured way
- Teachers make themselves aware of potential hazards
- The attention of pupils drawn to potential hazards
- Pupils are instructed in ways of working safely
- Pupils are taught to act in a responsible manner

### **Resources**

The science co-ordinators identify needs in discussion with other staff.

All resources are regularly monitored by the science co-ordinators and stored in clearly-labelled boxes in the corridor.

Reviewed Feb 2017      Review Date Jan 2020