



# **CHALKWELL HALL JUNIOR SCHOOL**

## **SCIENCE POLICY**

**Science team: Miss J.Norton**

**Reviewed and Approved by:**

Curriculum Committee

**Date:**

# CHALKWELL HALL JUNIOR SCHOOL

## SCIENCE POLICY

### **Aims and objectives**

Science teaches an understanding of natural phenomena. It aims to stimulate a child's curiosity in finding out why things happen in the way they do. It teaches methods of enquiry and investigation to stimulate creative thought. Children learn to ask scientific questions and begin to appreciate the way science will affect their future on a personal, national, and global level.

The aims of science at Chalkwell Hall Junior School are to enable children to:

- ask and answer scientific questions;
- plan and carry out scientific investigations, using equipment, including computers, correctly;
- know and understand the life processes of living things;
- know and understand the physical processes of materials, electricity, light, sound and natural forces;
- know about the nature of the solar system, including the earth;
- evaluate evidence and present their conclusions clearly and accurately.

### **Teaching and learning style**

**At Chalkwell Hall Junior School we follow a cross curricular creative approach to learning that incorporates all subjects. There are times when Science skills are taught discretely, but most of the time Science is taught through topic work and alongside all other subjects.**

We use a variety of teaching and learning styles in Science lessons, following our Learning and teaching policy which stresses creativity and personalised learning. Our principal aim is to develop children's knowledge, skills, and understanding in Science and their ability to generalise these skills in other areas of learning. Wherever possible, we involve the pupils in 'real' scientific activities where they have the opportunity to carry out a practical experiment and analyse the results.

### **Science curriculum planning**

We carry out our curriculum planning in science in three phases :long-term, medium-term and short-term. The long-term plan maps the scientific topics studied in each term during the key stage. Our medium-term plans, which have their basis from the QCA scheme of work in science, are usually taught through a topic every 6 weeks.

### **The contribution of science to teaching in other curriculum areas**

Science will be complemented by worthwhile and challenging cross-curricular studies that provide ample opportunities for children to use and apply their subject knowledge and skills to deepen understanding. Our creative curriculum is firmly underpinned by a skills based curriculum adapted from the National Curriculum. We aim to create coherent and more integrated learning experiences which will cover a number of curriculum objectives at once and save valuable curriculum time.

### **Inclusion and Differentiation: (also see SEN policy)**

All children must have regular access to science, appropriate to their stage of development.

Challenge for all is integral to our teaching and we aim to encourage all pupils to reach their full potential through the provision of varied opportunities. Work must be differentiated to aid children's learning. Also, more-able children should be given open-ended tasks and be given opportunities for further research and more challenging studies. We recognise that our curriculum planning must allow pupils to gain a progressively deeper understanding and competency as they move through our school. Any specific individual's needs must be identified in their IEPs.

### **Assessment and recording**

Formative assessment (Teacher assessments) forms the basis of our assessment in Science. We use summative assessment (tests) to back up our Formative assessments. Summative assessments can take the form of QCA, NFER or SATs tests.

Formative assessment is made on a daily basis to help us adjust our daily plans. These short-term assessments are closely matched to the teaching objectives. We make medium-term assessments to measure progress against the key objectives, and to help us plan the next unit of work. We make long-term assessments towards the end of the school year, and use these to assess progress against school and national targets. We can then set targets for the next school year and make a summary of each child's progress before discussing it with parents. We pass this information on to the next teacher at the end of the year, so that s/he can plan for the new school year. We make the long-term assessments with the help of end-of-year tests and teacher assessments. We use the National tests for children in Year 6 and our more able children in lower years

### **Resources**

We have sufficient resources for all science teaching units in the school. We keep these in a central store where there is a box of equipment for each unit of work. Individual year groups have an allocation of equipment more specific to the units of work they are teaching. The library contains a good supply of science topic books and there is an extremely comprehensive range of computer software to support children's individual research.

### **Monitoring and review**

The Science Team and all class teachers are responsible for monitoring the standard of the children's work and the quality of teaching in science. The Science Team is responsible for supporting colleagues in the teaching of science, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.

The Science Team will present an annual report to the Headteacher in which they evaluate the strengths and weaknesses in the subject and indicates areas for further improvement. The science Team must therefore make full use of non-contact time to undertake monitoring of science across the whole school