



HOLLYWOOD PRIMARY SCHOOL SCIENCE POLICY

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February 2019

Our Rationale for Teaching Science

Science is a body of knowledge built up through the experimental testing of ideas. Science is also methodology, a practical way of finding reliable answers to questions we may ask.

Science at Hollywood is about developing children's skills, knowledge and understanding they need to question and understand concepts and phenomena that occur in the world around them. Children will learn the skills required for scientific enquiry and they will begin to appreciate the way science will affect their future on a personal, national and global level.

We believe that a broad and balanced science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability. Our aims in teaching science include the following.

- Preparing our children for life in an increasingly scientific and technological world.
- Fostering concern about, and active care for, our environment.
- Helping our children acquire a growing understanding of scientific ideas.
- Helping to develop and extend our children's scientific concept of their world.
- Developing our children's understanding of the international and collaborative nature of science.

Attitudes

- Encouraging the development of positive attitudes to science.
- Building on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and responsibility.
- Building our children's self-confidence to enable them to work independently.
- Developing our children's social skills to work cooperatively with others.
- Providing our children with an enjoyable experience of science, so that they will develop a deep and lasting interest and may be motivated to study science further.

Skills

- Giving our children an understanding of scientific processes.
- Helping our children to acquire practical scientific skills.
- Developing the skills of investigation - including observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Developing the use of scientific language, recording and techniques.
- Developing the use of ICT in investigating and recording.
- Enabling our children to become effective communicators of scientific ideas, facts and data.

Our aim and approach to Science

- Science (*The National Curriculum*) is taught throughout the key stages with cross curriculum links fostered wherever appropriate which enhance their understanding of science, in ways that are imaginative, purposeful, well managed and enjoyable.
- Giving clear and accurate teacher explanations and offering skilful questioning to match the ability of each individual child
- Ensuring children are given enough time to study the four main areas of the science curriculum - Scientific enquiry, life and living processes, materials and their properties

and physical processes. When planning the learning experiences, the pupils' previous experiences and present understanding should be taken into account.

- Offering ample opportunity for practical investigation and enquiry and encouraging all children to ask and answer scientific questions.
- Teaching science outdoors as well as in the classroom
- Pupils are taught in their normal classes; through whole class, group and individual approaches, at the discretion of the class teacher. Lessons are taught through a wide range of styles and formats focussing on first-hand experience wherever possible and we actively encourage science outside of the classroom as much as possible.
- Tasks are set which are open-ended and can have a variety of responses so that all children can access them at their own personal level.
- Children are given the opportunity to work with a range of equipment to develop their skills including microscopes, digital cameras, images and photographs, books, diagrams, models, ICT and data loggers.

EYFS

Children in the Early Years Foundation Stage (EYFS) are taught scientific skills through the Area of Learning: Understanding the World. Through working on investigations, children in the EYFS learn to: estimate and predict, communicate their ideas clearly, cooperate with others, develop their observation skills and begin to simply record events. They also begin to use numbers and non-standard measures in many of their answers and conclusions. More able pupils may also begin to create, draw and read data from simple graphs, charts and tables.

Learning must be supported through offering opportunities for them to use a range of tools safely; encounter creatures, people, plants and objects in their natural environments and in real life situations; undertake practical experiments and work with a range of materials.

Timings

It is expected that science is taught for a minimum of

- 1 hour per week in KS1
- 1.5 hours a week in KS2

This time can be organised at the discretion of the class teacher, so can be taught weekly, as a block or addressed, for example during an Eco week or through topic days.

Special Educational Needs, Gifted and Talented and Equal Opportunities.

All children at Hollywood have equal access to Science regardless of race, gender and special requirements. We plan Science activities which appeal to pupils of all backgrounds and abilities.

We recognise the fact that we have children of differing scientific ability in our classes and so we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child,

It is the responsibility of the class teacher to meet the needs of all pupils in their class and to provide work which is differentiated to match the individual child, be it those children who are recognised as SEND and those considered to be working at greater depth. Differentiation may

be through the level of work given, the level of support by an additional adult or by expectations and outcomes.

Assessment, Recording and Monitoring in Science

We use assessment to inform and develop our teaching

- New topics commonly begin with an assessment of what children already know through a completion of a topic front cover, a discussion about what they already know / have previously learnt or a written diagnostic test.
- Work is marked following the school marking procedure, making it clear verbally, or on paper, where the work is good, and how it could be further improved.
- Errors with inaccurate use of scientific knowledge or scientific words which are misspelled should be corrected so that children can learn from them for the next lesson.
- At the end of each unit of work, children complete a formal written test, the scores are recorded by the class teacher.

EYFS

Knowledge and understanding of the world may be evidenced using photographs of the children working scientifically. Any oral evidence can be recorded by teachers during their observations.

The science coordinator will also conduct a termly book scrutiny to ensure all of the relevant National Curriculum objectives are brought alongside the working scientifically objectives and feedback will be given and support / guidance will be given where necessary.

Resources

The resources are stored in boxes in the science cupboard in the KS1 corridor. Each box is clearly labelled. Any further requests for resources should be addressed to the Science Leader.

Health and Safety

Children should be taught the correct and safe use of equipment and the carrying out of simple safety procedures as an intrinsic part of their science lessons. Safety equipment is available in the science cupboard

A risk assessment should be carried out in line with school policy in regards to any school trips or experiments out of school grounds.

It is the teacher's responsibility to ensure any investigations carried are done so in a safe way for the protection of their class.

Birmingham have a subscription to CLEAPSS, Brunel University, Uxbridge UB8 3PH (*Tel:* 01895 251496; *Fax:* 01895 814372; *E-mail:* science@cleapss.org.uk; *Web site:* www.cleapss.org.uk) for the purpose of obtaining risk assessments and for general advice on health & safety matters in science and technology. **In an emergency, advice can be obtained by contacting CLEAPSS.**

[CLEAPSS Health and Safety in Primary Science and Technology](#)

Review

This science policy will be reviewed February 2021 or after significant changes to the curriculum and/or assessment procedures. Review to be completed by the Science Curriculum Leader and Senior Management.