

Science Curriculum Statement

“Scientists have become the bearers of the torch of discovery in our quest for knowledge.” – Stephen Hawking

Policy reviewed by: Julia McCormack
Policy last reviewed: 1st December 2016
Next review due: 1st December 2018

Aim and Ethos

Science is one of the core subjects of the National Curriculum and is considered to be one of the key curriculum areas at Duncombe School. It is an enjoyable and highly motivating subject which can help children to develop an understanding of the world around them and to have an inquisitive approach to life.

As a school we aim to:

- Provide a broad and balanced science curriculum for the benefit of all our pupils.
- Ensure continuity and progress in children’s scientific development throughout the school.
- Foster the development of scientific skills, attitudes and critical thinking, which will enable children to extend their knowledge, to tackle problems and to form independent judgements.
- Encourage respect for the environment and a responsible attitude towards the natural world and its resources.
- Develop the skills of observation, prediction, investigation, interpretation, communication, questioning and hypothesizing.
- Enable pupils to be creative in their approach to science.
- Enable pupils to develop co-operation through working with others.

Teaching and Learning

All pupils will be introduced to a wide range of scientific experiences from the National Curriculum Programmes of Study, [which can be viewed here](#). Science is taught through the scientific disciplines of biology, chemistry and physics. Practical scientific methods, processes and skills are developed through working scientifically by: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. The range of topics taught can be viewed on our [curriculum overview](#).

Our aims include:

- Information technology should be used, where appropriate to enhance teaching.
- Teachers to provide an environment which encourages children to question, predict and hypothesise, and where all children’s opinion will be valued.
- Pupils should be exposed to a variety of teaching styles including whole class, group and individual.
- Wherever possible, science lessons will be taught in a meaningful context which shows children their relevance to everyday life.
- Children will experience a range of approaches such as oral, practical, written and investigative, through their work in science.
- Teachers will aim to ensure that classroom displays/science vocabulary is stimulating and that they reflect the topic which is being done in class.
- There is a commitment to outdoor learning and each year group will have an exciting science experience to support a topic of learning.

Resources

Every year group has specific topic for each half term. Resources are organised into topic boxes which are held centrally and can be accessed through the subject leader.

Assessment

- Children's knowledge and investigative skills should be regularly monitored by the classroom teacher and recorded to provide individual records of achievement and progression throughout the year. This is monitored by the subject leader.
- Monitoring is conducted through observation, discussion when using the formative assessment tests and marking of written work.
- The classroom teacher must regularly mark children's science work and investigations according to the school's marking policy, supported by oral feedback where necessary.
- Formal summative assessment is provided at the end of each academic year.

Equal Opportunities

- Teachers will have high expectations of all children regardless of race, gender, class and special needs.
- Teachers will strive to ensure that children have equal access to learning experiences offered through the science curriculum.
- Teachers will acknowledge the achievements of all cultures and will strive to present positive role models.
- Children who are seen as having an interest in science may join the Science Club.

Health and Safety

- Teachers will ensure that all activities are carried out in a safe environment and that children are made aware of any dangers associated with the activities.
- Any additional adults who may supervise a science activity must also be made aware of any health and safety issues.
- Safety equipment, including goggles, is available from the post holder and must be used for all relevant activities especially when heating substances that may project particles at high speed.

Monitoring and Evaluation

We aim to maintain high standards in science all areas of learning in science are regularly monitored by the subject leader.

This may include: book looks, planning scrutiny, work scrutiny, learning walks, lesson observation, resource monitoring, pupil interviews, curriculum and/or progression mapping.

These findings are shared with the head teacher, senior management team and our science governor.

Review

This policy has been edited and reviewed in December 2016. The next date of review will be December 2018.