

Crockerton Church of England Primary School

Potters Hill, Crockerton, Warminster, Wiltshire, BA12 8AB Web: www.crockerton.wilts.sch.uk Tel: 01985 212168

Headteacher: Mrs Nic Ilic

VISION STATEMENT

Be joyful. Grow to maturity. Encourage each other. Live in peace and harmony.

2 Corinthians 13:11

Science Policy

This is a single policy which has been written on behalf of the Governing Body for Crockerton Church of England VA Primary School.

Written	November 2011
Reviewed	September 2022
Author	Headteacher & Science Lead
Review Cycle and Approval	2 Years Head Teacher
Next Review	September 2024

We are committed to safeguarding and promoting the welfare of children and young people



Science stimulates and excites pupils' curiosity about phenomena and events in the world around them. It also satisfies their curiosity with knowledge. Because science links direct practical experience with ideas, it can engage learners at many levels. Scientific method is about developing and evaluating explanations through experimental evidence and modelling. This is a spur to critical and creative thought. Through science, pupils understand how major scientific ideas contribute to technological change — impacting on industry, business and medicine and improving the quality of life. Pupils recognise the cultural significance of science and trace its world-wide development. They learn to question and discuss science-based issues that may affect their own lives, the direction of society and the future of the world. However, it is important to remember that science is about questions and many of these may remain unanswered.

At Crockerton, we believe that science should be practical, relevant to children's lives and the wider community, inclusive and creative

Aims

At Crockerton we hope children will:

- pose and answer scientific questions, including developing the skills of predicting and observing;
- plan and carry out scientific investigations using equipment, including ICT, safely and accurately;
- know and understand the life processes of living things;
- know and understand the physical processes of materials, electricity, light, sound and natural forces;
- know and understand the chemical changes of different materials;
- know about the nature of the solar system, including the earth;
- evaluate evidence and present their conclusions clearly and accurately.

Staff training

The Science Subject Leader is responsible for ensuring that all staff are adequately trained so that they are able to deliver the curriculum effectively. This will include: organising CPD; leading staff meetings; sharing resources for planning and teaching; supporting colleagues. Regular communication with staff will be sustained and all staff can speak to the subject leader if they require any further support.

Organisation

Science, at Crockerton, is taught as a discrete subject to ensure continuity and coverage of the requirements of the National Curriculum. Cross-curricular links are included when and where relevant; science may be included to support learning in other areas of the curriculum.

Long Term Planning

Curriculum maps outline the units to be taught in each year group/mixed age class.

Medium Term Planning

Teachers should complete a medium term plan so that they can plan for clear progression. There is a specific planning format to follow. Medium term plans will be shared with the subject leader to ensure that there is progression between year groups/classes.

Medium term plans should provide an overview of each unit of study, breaking it down into individual lessons or 'chunks of learning'. The medium term plan should identify learning objectives, main learning activities and differentiation.

Medium term plans will also detail prior learning (based on assessments and notes from previous plans/ information in Science folders) and next steps for future learning (these will be added to plans at the end of units).

It is recommended that teachers annotate their medium term plan after each lesson and after continual assessment for learning, ensuring fluidity between sessions.

Short Term Planning

Short term planning is the responsibility of individual teachers, who build on their medium term planning by taking account of the needs of the children in their class and identifying the way in which ideas may be taught. These plans are solely for the benefit of the class teacher and do not need to be shared with the subject leader.

Planning will show a balance of teaching and learning approaches, with an emphasis on scientific enquiry. Recording will be appropriate to the age and ability of the child and will be in a variety of forms, such as: photographs, drawings and written responses.

Marking and recording work

Please refer to the whole school marking and feedback policy. There is a subject-specific marking and feedback sheet for Science (to be completed each lesson).

Work completed in lessons will often be recorded in Science books but may also be recorded in different ways (for example using Google classrooms or Target Tracker observations). Marking and feedback sheets completed each lesson document evidence of learning, meaning that work does not always need to be formally recorded.

Science Folders

Science folders will be kept for Year groups 1-6. The folders will include medium term planning, short term planning when appropriate, useful lesson resources, examples of work and marking and feedback sheets for each lesson taught. The folders will move up with each year group as they go through the school to ensure class teachers can easily access information about attainment, prior learning and next steps in learning.

Assessment

Assessment will be continuous and will involve: questioning, discussion, marking and feedback sheets, formal assessment tasks and observation etc. This knowledge will be used to inform and adapt planning. Progress is monitored through our school assessment tool, Target Tracker, and appropriate targets set. Coverage is also monitored through our assessment system. Marking and feedback sheets (completed each lesson) ensure continuous formative assessment and the information on these can be used to inform summative assessments when necessary.

Teaching Style

Science teaching should include visual, auditory and kinaesthetic elements to ensure access for children with different learning styles.

All lessons have clear learning objectives, to be shared and reviewed with the pupils. Lessons may make effective links with other curriculum areas and subjects, especially English, Maths and Computing.

Teachers should plan opportunities for outdoor learning wherever possible.

Inclusion

At Crockerton, science is taught to all children, whatever their ability. Science forms part of the school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the needs of all children.

Reporting to Parents

Parents meetings are two times a year. Science is also reported to parents in Mid-Year annual reports, sharing progress and attainment and informing parents of their next steps.

Resources

The majority of resources are held centrally in the resource room. Teachers must request any additional items through the Subject Leader and ensure that resources are available before the start of a unit. Safety information will be updated in the policy and at staff meetings when necessary.

Safety Information

Children are taught the safety rules appropriate to the tools and equipment they are using. Safety equipment is worn where appropriate eg. aprons, goggles and gloves. Hair and clothes should be secured during every science lesson to ensure an ethos of good practice.

Animals are not kept at school. However, they may visit as part of a topic and on these occasions proper regard is paid to the care of the animals relating to health and safety. Live creatures should always be handled with care and respect for the animal's safety as well as the children's. Permission should be sought from parents/carers before an 'animal visit' to highlight any allergies and phobias.

The following specific safety aspects must be taken into consideration:

- children should not run when carrying equipment
- misplaced objects can cause falls or breakages
- hands should be washed after any investigations and before handling food
- disinfection may be necessary if animals are handled
- care must be taken introducing animals that may cause allergies
- children should be taught that some plants are poisonous and be taught not to handle any plants they are unsure of
- 'throwing and 'dropping' investigations must be carried out in carefully monitored situations
- When dealing with naked flames, children should be carefully supervised, use heatproof tongs and have a sand bucket ready etc. Hair and clothing must be secured.
- Pupils must never look directly at the Sun
- Thermometers need to be handled carefully any breakages are to be dealt with by an adult
- Magnets can affect other equipment eq. videos, computers etc.
- Wounds resulting from animal bites or scratches must be carefully treated and recorded in the accident book and a parent/carer informed
- Materials should only be smelt or tasted (permission sought from parent/care) under adult supervision
- Teachers are aware of any materials which can cause an allergic reaction