

	<h2>South Bersted CE Primary Science Policy</h2>
Web and/or Internal	Web and Internal
This policy should be reviewed every	Every three years
Policy approved by Governors	Spring 2020
Date of Review	Spring 2023
Member of staff responsible	Headteacher
Policy created by	SBS
Signed by Chair of Governors and/or Headteacher	

Introduction:

At South Bersted Church of England Primary School, we want all pupils to recognise and achieve high standards. The science policy outlines the teaching, organisation and management of science to support pupils aiming for excellence. The implementation of this policy is the responsibility of all teaching staff.

Aims:

At South Bersted C of E Primary School, we believe that the best science teaching fosters and develops pupils' curiosity in the subject whilst also helping them to fulfil their potential. For our pupils to achieve well in science, they need to acquire the necessary scientific knowledge and also be able to enjoy the experience of engaging in purposeful scientific enquiry, which enables them to answer scientific questions about the world around them.

The National Curriculum for science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future,
- see the implications of change and to apply principles to new situations,

- are effective in debates about issues that affect their lives such as health education, pollution, conservation and alternative energy resources.

Science Curriculum:

The programmes of study for science are set out year-by-year for Key Stages 1 and 2 in the National Curriculum. The subject leader and class teachers are responsible for ensuring that all of the relevant statutory content is covered within the school year. The National Curriculum gives a full breakdown of the statutory content to be taught within each unit. A curriculum progression overview has been developed to ensure that pupils at South Bersted C of E are taught and experience the full breadth of science curriculum. In the Early Years, science is planned using the Early Years Curriculum, 'Understanding the World.'

Planning:

- Key Stage 1 and 2 teachers plan science lessons using the new National Curriculum (2014).
- All science lessons have focussed learning objectives and clear differentiation to ensure that pupils make progress.
- 'Working scientifically' is embedded throughout the areas of learning in Key Stages 1 and 2; this focuses on the key aspects of scientific enquiry which enable pupils to investigate and answer scientific questions.
- Areas of learning within Key Stages 1 and 2 ensure that statutory requirements are being covered through the specific disciplines of biology, chemistry and physics.
- At the beginning of a unit of work, children are introduced to the topic through a 'Big Question'. Teachers should assess what pupils already know through the use of Mind Maps, KWL (What I know, What I want to Learn and What I have Learnt) grid or through effective questioning related to 'Bright Ideas.'

Short term planning is the responsibility of individual teachers, who take account of the needs of the pupils in their class and identify the way in which concepts might be taught. To support teachers in planning they have access to the STEM and Hamilton Trust materials.

All lessons have clear learning objectives, to be shared and reviewed with the pupils. Lessons will make effective links with other curriculum areas and subjects, especially English, mathematics and computing where appropriate.

The programmes of study describe a sequence of knowledge and concepts to be taught. While it is important that pupils make progress, it is also vitally important that they develop secure understanding of each concept in order to progress to the next stage. Pupils should be able to describe associated processes and key characteristics using technical terminology accurately and precisely. They should build up an extended specialist vocabulary. Pupils should also apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data. Teachers should plan to allow for a wide range of scientific enquiry, including: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources.

Assessment:

All pupils are tracked termly using the in-school tracking system, Target Tracker. After 2 units of work, class teachers assess pupils based on their scientific knowledge and understanding linked to

the objectives in the National Curriculum. In addition to this, pupils are assessed in working scientifically across the year and phase: Key Stage 1, Lower Key Stage 2 and Upper Key Stage 2.

Each term, pupil progress is captured and tracked against a year group's targets, which are related to their prior attainment in the Early Years and Key Stage 1 teacher assessments.

Teachers will assess pupils' understanding using a variety of Assessment for Learning (AfL) strategies: end of unit assessments, observing pupils, questioning pupils, assessing pupils' work against the success criteria. To encourage pupils to become reflective in their own learning, at the end of each lesson pupils self-assess based on the lesson's success criteria as referenced in the Assessment for Learning Policy. Teachers will use the exemplification documents produced by the STA to support them in assessing science at the end of each Key Stage.

Recording of learning:

In the Foundation Stage, objectives will be recorded in a pupil's learning journal. Across Key Stages 1 and 2, pupils have their own science work books that follow them through the school to record their learning. Pupils should be provided with opportunities to record their learning: written, pictorial, tables or graphs. All work should be marked in line with the school's marking and feedback policy.

Safety:

All staff follow the Be Safe – Safety in Science and Technology and CLEAPSS (Consortium of Local Education Authorities for the Provision of Science Services) guidance. When undertaking practical tasks, including those related to health and safety procedures when cooking, teachers and pupils must recognise and assess any hazards and risks and complete a risk assessment where appropriate. In addition to this, pupils should also be taught to care for and use science equipment correctly.

Inclusion:

At South Bersted C of E, all lessons should be appropriately differentiated to meet the varying needs of all pupils; ensuring that pupils of all abilities and backgrounds have an equal opportunity to make good progress and enjoy science. Pupils who achieved an assessment of 'greater depth' in their prior attainment are tracked as a more able pupil and should be identified on all planning.

Monitoring and evaluating the impact of science:

The science subject leader completes their own monitoring schedule and reports to governors on the impact of their strategic action plan during the curriculum team meetings. In addition to this, science books are included during termly book scrutinies.

Reporting to parents:

Parents are informed of their child's attainment in science through their annual report. Parents will receive information on the programmes of study and their child's attainment within those areas: below expected, at expected or exceeding the expected standard. Parents will also receive key information linked to their child's ability in working scientifically.

Resources:

Trays and topic boxes are maintained by the subject leader in the resources room. The trays are labelled and organised alphabetically. Missing or broken resources should be reported to the subject leader as soon as possible and not put back broken, as this could cause injury.