



Overleigh St Mary's C of E Primary School

Science Policy

Signed by:

Summer 2024

Head teacher

Date:

Chair of governors

Date:

Summer 2024



SCIENCE POLICY

Date Authored: Summer 2024
Date to be reviewed: Summer 2025
Co-coordinator: Amy Griffiths

PURPOSE / VISION STATEMENT

Science is a fundamental part of everyday life and developing understanding and knowledge in this area is essential for the development of our pupils at Overleigh St. Mary's CE Primary School. We believe that science encourages children to ask questions and develop an understanding of the world around them. As science is a core subject, it takes a prominent place in the curriculum and has links with many other curriculum areas. This policy outlines the teaching, organisation and management of the Science taught at Overleigh St. Mary's CE Primary School.

AIMS & OBJECTIVES

- To develop scientific **knowledge** and **conceptual understanding** through first-hand experience, in a climate which encourages: curiosity, perseverance, open mindedness, critical reflection and co-operation.
- To **apply scientific ideas** to real life problems.
- To become **curious** about the world around them and to **ask questions** which broadens their scientific knowledge and understand.
- To 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.
- To **effectively communicate** scientific ideas to others, using a variety of media.
- To gain scientific knowledge required to **understand the uses and implications of science**, today and for the future.

LEGAL / STATUTORY REQUIREMENTS (if appropriate)

PROCESSES IMPLEMENTED IN SCHOOL

Teaching and Learning

i. Planning the Curriculum

- Science at Overleigh is usually taught through a thematic approach. The required amount of time given over to the teaching of science on a weekly basis is a minimum of 2 hours in Key Stage One and Two. Science is taught and assessed on a continuous and regular basis. It is expected that all areas of the National Curriculum Programmes of Study will be covered.
- Full coverage for the programmes of study for Foundation Stage is on an annual cycle and is an integral part of "Understanding of the World" area of development.
- Key Stage 1 is planned within each year group with discreet and common programmes of study. Where the programmes of study are common to each year group, such as 'plants', the topic will be covered at a more advanced level within Year 2 building on the children's knowledge and skills. The curriculum map for these topics can be found in the **Progression of Science Topics Throughout School** document.
- At Key Stage 2, coverage of programmes of study for all attainment targets is planned within each year group as in Key Stage One. Where the scientific topic is repeated in multiple year groups such as 'Animals including humans', the more complex and advanced elements will be taught in upper Key Stage Two, Years 5-6, allowing for continuity and progression of skills. This will also allow opportunities for re-visiting, reinforcement and progression of skills throughout the school. The curriculum map for these topics can be found in the **Progression of Science Topics Throughout School** document.
- The 'Working Scientifically' aspect of the curriculum runs throughout Key Stage One and Two. These skills have been broken down and mapped across the Year groups in the '**Progression in Working Scientifically**' document.
- The science curriculum is delivered within contexts for learning that incorporate a thematic and flexible approach to teaching and learning.

ii. Special Educational Needs

- Teachers should teach knowledge, skills, and understanding in ways that suit their pupils' abilities. This may mean choosing knowledge, skills and understanding from earlier or later Key Stages so that individual pupils can achieve and make progress. Where it is appropriate for pupils to make extensive use of content from an earlier Key Stage, there may not be time to teach all aspects of age related programmes of study.

iii. Health and Safety

- All scientific activities will be carried out in a safe working environment. It is the teacher's responsibility to ensure the safety of each child during science lessons and on their planning of activities, teachers will anticipate likely safety issues. They will also explain the reasons for safety measures and discuss any implications with the children. Children should also be encouraged to consider safety for themselves, others, the environment and the resources they use, when undertaking scientific activities. A copy of "Be Safe" published by the ASE should be available in every year group. A folder of CLEAPPS School Science Guidelines is also available in the staffroom.

DISSEMINATION

This policy and all subsequent changes in practice due to developments in the subject [at a national level] will be shared with all staff at regular staff meetings.

RESOURCES / RESOURCE ALLOCATION

Resources are stored in the Science resource area in labelled topic boxes. Teachers are also encouraged to supplement their resources with those from Winsford Development Centre. The Subject Coordinators are responsible for purchasing resources and maintaining the resource area.

RESPONSIBILITIES

AS A GOVERNOR

The governing body will be informed of significant developments within the subject area and, if necessary, their approval will be sought. Our governors support, monitor and review the school's policies.

AS THE HEADTEACHER

Alongside the senior leadership team and the subject co-ordinators, it is the Headteacher's responsibility to monitor standards and report these to the governing body.

AS THE SUBJECT LEADER

The responsibility for ensuring coverage of the National Curriculum lies first with the subject leader but ultimately with the individual teacher.

The science coordinator will ensure that they co-ordinate their subject in accordance with school and professional expectations as set out in the Standards for Teachers.

In addition they will endeavour to:

- be aware of national and local developments through reading relevant materials and attending courses.
- support children's learning through arranging school visits, industrial links, and extra curricular science activities where appropriate.
- Work to achieve inclusion and equality throughout the school.

AS A TEACHER

The responsibility for ensuring coverage of the National Curriculum lies first with the subject leader but ultimately with the individual teacher. It is each teacher's responsibility to ensure that all children have access to the Science curriculum through quality first teaching.

AS A PARENT/PUPIL/OUTSIDE AGENCY

Curriculum maps, stating Science skills to be covered, are uploaded to each class's page on the school website half termly. End of year reports comment on a child's aptitude for Science as well as their enthusiasm for the topics covered.

ASSESSMENT AND RECORDING

Assessment of children's learning will be used to inform teaching, in a continuous cycle of planning, teaching and assessment.

In the Foundation Stage there is ongoing assessment through the Foundation Stage Profile for each individual child. The profile for each child records when they have met each development stage. By the end of EYFS children are expected to be working within the Early Learning Goal for the area of development, Understanding of the world.

Formal ongoing assessment of pupil progress within KS1 and KS2 is tracked using iTrack. Evidence to support teacher's judgements can be found in the children's science books through a variety of assessment techniques, (listed below). Each aspect of the Science programme of study is assessed throughout the year and is used to inform teacher assessment for each child in the class.

In Key Stages 1 and 2, formative assessment of children's work is made through a start of unit assessment, which assesses the children on their knowledge of their previous learning in this unit; a mid-term assessment, which consists of 6 questions based on what has been learnt so far in the unit; and an end of unit assessment. Our marking policy states that feedback should be given immediately, so we endeavor to give verbal feedback and support to children during the lesson based on our assessment of their understanding. Also, at the beginning of each lesson, children will complete 'sticky learning' as a quick recap of the prior knowledge and skills covered in previous strands and lessons to assess the children's understanding and inform planning.

Learning objectives are identified for each lesson and teachers will highlight individual children who have not met the learning objective (or exceeded the learning objective) within each lesson, this can be used to inform next steps for those individual children and will also support the teacher's judgement at the end of each unit/year.

Assessment techniques: sticky learning, start, mid and end of unit assessment, observations of pupils' work, questioning, oral presentation by pupils, children's responses, structured worksheets, self-evaluation by the pupils, pupils' written or graphical work and science tests. Given the nature of Science and Scientific Investigation, it is important that teachers assess not only the observed outcomes of learning but also the processes of learning and address any misconceptions that have occurred.

Records of iTrack assessment in all Science attainment targets will be kept throughout the Key Stage to inform the end of Key Stage teacher assessment.

MONITORING & REVIEW

The subject leader is responsible for monitoring the ongoing standards of the children's work and the quality of teaching in Science throughout the academic year. The subject leader 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 subject leader completes termly reviews culminating in an annual review, identifying strengths and areas for further development. This information will be shared with the Governor Curriculum and Ethos Committee. The Science subject leader will maintain a pro-active approach to agreeing non-contact time for monitoring and evaluating. This may include evidence of book scrutiny, monitoring of planning, learning discussions with children or lesson observations. Evidence of monitoring and evaluating will be included in the subject leader file.

REPORTING TO GOVERNORS

Material changes to practice and policy will be shared through the Curriculum and Ethos Committee, and children's progress (at a school level) through the Achievements and Standards Committee.

OTHER POLICIES TO BE READ IN CONJUNCTION WITH THIS POLICY

Assessment

Health and Safety

SEND (Inclusion)
