

Longcot and Fernham Primary School



Science Policy

2024

School	Longcot and Fernham CE Primary School
Date of policy	September 2024
Member of staff responsible	Mrs Sally Robins
Review date	May 2025

Intent

At Longcot and Fernham Primary School we believe that Science should inspire pupils' curiosity and lead them to know more about the world around them. We teach children to understand how to question, enquire, investigate as well as develop curiosity and stimulate wonder. We believe science is a core part of educational learning and as a subject plays a major part in technological, scientific and societal change.

Our school values of Love, Honesty and Respect are embedded throughout the curriculum and play a significant role within science lessons at Longcot and Fernham Primary School, including the importance of working safely scientifically.

Using the CUSP Curriculum, we aim to guide children in developing a deep understanding of concepts we consider core to developing highly-skilled scientists. These core concepts are:

- working scientifically, which includes observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing; and researching using secondary sources
- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of science enquiry that helps them to answer scientific questions about the world around them
- use scientific knowledge to understand the uses and implications of science, today and for the future

Implementation

The foundations of CUSP science are cemented in the EYFS through learning within the Natural World, and People, Culture and Communities. Our ambitious interpretation of the National Curriculum places knowledge, vocabulary, working and thinking scientifically at the heart of the principles of, structure and practice. CUSP Science precisely follows the units outlined in the National Curriculum.

Classes plan and deliver their science lessons following long-term and medium-term plans, which we use the CUSP Curriculum to form. Each lesson follows 6 essential steps to allow for deep, long-term learning to occur. Please see our **Teaching and Learning Policy** for specific detail on this structure.

Safe practice, as indicated in The Association of Science Education publication, "Be Safe!" is always promoted. Teachers take into account the school's Health and Safety policy. Safety issues are identified in medium-term planning and risk assessments completed, when activities are identified that are unusual and beyond the scope of normal safety practice. Children are taught the rules of safety when undertaking experiments and investigations and all adults working on activities are aware of the safety precautions and guidelines necessary.

CLEAPSS guidance for school may be accessed here:

<https://primary.cleapss.org.uk/Resources/DoingThings-Safely/>

Using the CUSP curriculum, we have mapped out the concepts, skills and objectives covered each term for each year group.

In Biology, it is the study of Animals, including humans, Plants, Living things and their habitats and Evolution and inheritance.

In Physics, it is the study of Seasonal changes, Light, Forces and magnets, Electricity, Sound, Forces and Earth in Space.

In Chemistry, it is the study of Everyday materials, Uses of everyday materials, Rocks, States of matter, Properties and changes of materials.

Within each year group in KS1 and KS2, children will experience **Strong Start** lessons, which allow for key knowledge to be revised or developed before a fuller topic commences. **Reference Lessons** may also be taught as deemed necessary to support or ignite prior learning and strengthen link making across units. We believe the application of both **Strong Start** and **Reference Lessons** strengthens the progression within our curriculum.

The CUSP Curriculum clearly maps a rich and ambitious vocabulary progression for each unit. We believe that clear and direct vocabulary instruction is central to children making progress and become informed and accurate scientists who can interpret, analyse and evaluate essential concepts.

Effective use of educational visits and visitors are planned where possible to enrich and enhance the pupils' learning experiences within the Science curriculum.

In Science, as across the curriculum, we ensure that children with SEN are scaffolded in their learning to access the same content as their peers. This is achieved with the support of the 'Securing' Knowledge Notes as a point of reference, additional adaptations as outlined in the child's Pupil Profile/ Support Plan and specific resource, or adult intervention as required.

Impact

We use assessment as an integral part of our teaching process and use it to inform future planning and to facilitate scaffolding. Therefore, assessment is an ongoing process made using formative evaluations within lessons, low stakes retrieval and by marking, feedback and scribed pupil comments.

Teachers will make yearly summative assessment judgements using evidence on how well children have made progress against the core concepts outlined in the CUSP Curriculum. Teachers will record children's progress after each unit to help inform end of year judgements and aid effective monitoring from Subject Coordinators and SLT. This summative assessment is reported to parents annually.

Monitoring from Subject Coordinators and SLT takes place regularly to ensure coverage, progression and continuity throughout the school. This is done through sampling children's work, teacher planning and talking to staff and pupils. Lesson observations are used to provide support to other members of staff and as part of professional development. In the Foundation Stage assessments are made under the main heading of 'Understanding the World.' Assessments are mainly made through observation and questioning. This information is tracked against the Development Matters criteria and used to inform judgements against the Early Learning Goals.