



At Langdale CE Primary School, our science curriculum aims to create curiosity and equip pupils with the skills to explore and understand the natural and physical world around them. Aligned with our school's vision, we encourage each child to become a confident, lifelong learner, developing scientific knowledge, enquiry skills, and a deep appreciation for God's creations. Inspired by John 10:10, our science curriculum is designed to provide opportunities for every child to experience "Life in all its Fullness" in a respectful, inclusive, and collaborative environment where *every child is valued and no one is left behind*.

2. Aims of the Policy

This policy aims to:

- Deliver an engaging and comprehensive science curriculum that aligns with the national curriculum and provides foundational scientific knowledge and skills.
- Create an inclusive learning environment where each child is encouraged to explore, question, and make sense of the world around them.
- Nurture a sense of environmental responsibility and respect for the diversity of life, encouraging pupils to appreciate the interconnectedness of all things.
- Cultivate a sense of wonder, critical thinking, and resilience in each child, ensuring that all pupils feel valued and are given opportunities to succeed in science.

3. Vision for Science

Our science curriculum is designed to:

- Develop a secure understanding of key scientific concepts and processes, including knowledge across a range of scientific areas.
- Foster scientific enquiry skills, including observation, experimentation, classification, and data collection/interpretation, enabling pupils to ask questions, investigate, and draw conclusions.
- Encourage pupils to make connections between scientific learning and the wider world, understanding the impact of science on everyday life, technology, and the environment.
- Celebrate diversity by exploring scientific contributions from a range of cultures, backgrounds, and historical contexts.

4. Curriculum Goals

Aligned with the national curriculum, our science program ensures that pupils:

- Build a strong foundation in the key disciplines across science.
- Develop the skills to work scientifically, learning to observe, predict, hypothesise, test, and conclude.
- Use scientific vocabulary accurately to describe, discuss, and communicate ideas, enhancing their ability to think critically and express their understanding.
- Learn about and explore seasonal changes, plants, animals, habitats, materials, forces (and more) with an emphasis on hands-on investigations and experiences.

- Appreciate the role of science in courageous advocacy and consider ethical implications, nurturing a sense of responsibility for the natural world.

5. Teaching and Learning

Our approach to teaching and learning in science includes:

- **Experiential, Enquiry-Based Learning:** Providing opportunities for pupils to investigate, explore, and experiment, encouraging curiosity and active engagement.
- **Development of Enquiry Skills:** Building skills in observation, testing, and evaluation through structured enquiry, helping pupils learn to make and test predictions, record data, and draw conclusions.
- **Cross-Curricular Connections:** Linking science with subjects such as mathematics, geography, and design and technology to enrich understanding and relevance.
- **Use of Scientific Vocabulary:** Teaching pupils key terminology to articulate scientific ideas and processes, helping them build a solid foundation in scientific literacy.
- **Outdoor and Environmental Learning:** Utilising the natural environment to explore and study habitats, plants, and ecosystems, promoting a connection with God's creation around them.
- **Reflective Practice:** Encouraging pupils to think critically, evaluate their findings, and consider how science can be applied to solve real-world problems.

6. Inclusion and Accessibility

Aligned with our vision, we ensure that science is accessible and engaging for all pupils by:

- Providing considered instruction to meet the needs and abilities of all learners, including those with additional needs;
- Using adaptive equipment, technology, and materials to ensure that all pupils can participate fully in scientific activities and investigations;
- Celebrating the contributions of each pupil, recognising that each child brings unique perspectives and ideas to their scientific learning;
- Encouraging pupils from all backgrounds to engage in science, appreciating the diverse contributions to scientific knowledge throughout history.

7. Values in Action

Our science curriculum actively promotes our school values:

- **Respect and Compassion:** Pupils learn to respect diverse ideas, ask questions thoughtfully, and work collaboratively, showing compassion for different perspectives.
- **Perseverance and Trust:** Group investigations and experiments foster teamwork, enabling pupils to learn from one another and appreciate the value of collaborative inquiry.
- **Thankfulness and Aspiration:** Through projects focussed on sustainability, conservation, and ecological awareness, pupils strive to develop an understanding of their responsibility to care for God's creation.

8. Health, Safety, and Wellbeing

To ensure a safe and supportive learning environment in science, we:

- Teach pupils to handle scientific equipment safely and responsibly, following health and safety guidelines;
- Conduct regular risk assessments for experiments, materials, and activities to minimise hazards;
- Promote awareness of personal and group safety during scientific investigations, reinforcing a culture of safety and responsibility;
- Encourage pupils to communicate concerns and ask for guidance when needed, supporting their confidence in working safely.

9. Assessment and Evaluation

Our approach to assessment in Science is both formative and summative, focusing on:

- **Knowledge and Concept Understanding:** Assessing pupils' understanding of scientific concepts as well as their ability to apply this knowledge to new contexts.
- **Development of Enquiry Skills:** Observing progress in scientific skills, such as hypothesising, testing, measuring, and drawing conclusions.
- **Use of Scientific Vocabulary:** Assessing pupils' ability to describe and communicate scientific ideas accurately and effectively.
- **Reflection and Self-Evaluation:** Encouraging pupils to evaluate their own investigations, set personal goals, and learn from feedback.
- **Peer and Teacher Feedback:** Providing constructive feedback that highlights strengths and offers guidance for further development.

10. Monitoring and Review

The subject lead will conduct the following monitoring:

- Learning walks
- Book looks
- Pupil voice
- Evaluation of summative assessment

This science policy will be reviewed regularly by the subject lead to ensure it continues to align with our school's vision, values, and national curriculum requirements. Updates will incorporate best practices, advancements in science education, and feedback from pupils and the wider school community, supporting continuous improvement of our science curriculum.