Hillstone Primary School Science Policy

Vision Statement

At Hillstone Primary School, our vision for science is to create a learning environment where curiosity thrives and every child feels empowered to explore, question, and understand the world around them. We aim to provide an inclusive, engaging, and practical science education that connects learning to the children's lives. Through hands-on experiences, cross-curricular links, and the use of technology, we prepare our pupils for a future shaped by science and innovation.

1. Rationale for Teaching Science

Science helps children make sense of their surroundings through questioning and investigation. All children, regardless of background or ability, deserve a broad, balanced, and enjoyable science education. Sparking curiosity is central to science education; it encourages children to ask questions, explore ideas, and develop a lifelong love of learning.

Our key aims:

- Prepare children for life in a scientific and technological world.
- Develop understanding of key scientific principles.
- Encourage curiosity and use it to drive learning.
- Help children relate science to their own lives.
- Promote care for wildlife and the environment.
- Provide enjoyable experiences that spark long-term interest in science.
- Demonstrate and celebrate diversity in science.
- Develop practical science skills.
- Enable children to communicate scientific ideas, facts, and data effectively.

2. Teaching Approach

Our teachers aim to:

- Deliver purposeful, well-managed, and enjoyable lessons.
- Give clear explanations, ask thoughtful questions, and use assessment for learning to inform teaching.
- Relate science to children's experiences
- Prioritize practical learning, enquiry and discovery
- Focus on teaching science skills as well as knowledge.
- Link science to other subjects, especially computing, to enhance learning.

3. Structure of Science in School

Science is taught through a thematic curriculum focused on investigation, observation, and application.

- Timing: Most topics last half a term; some span a full term. Topic overviews are available on the school website. Each topic focuses on either science, geography or history. During non-science units, at least one scientific enquiry is taught to help ensure children have sufficient opportunities to develop science skills
- Project Overviews: Summarise purpose, content, key vocabulary, prior learning, knowledge and skills. Teachers use overviews to inform planning
- Initial Assessment: At the start of each topic, assess prior knowledge using KWL sheets, quizzes, or discussions.
- Unit Sheets: Present objectives in child-friendly language and help track progress.
- Working Scientifically: Enquiry skills are taught explicitly. Children take more responsibility for planning, carrying-out, recording, and reviewing investigations as they move up through the school
- Computing: Technology (such as stopwatches, cameras and tablets) is used to support enquiry and presentation of enquiry findings
- Extracurricular: Science club, competitions, visits, trips and an annual science fair during British Science Week. Gardening and food-growing activities link science to healthy living.

4. Assessment and Recording

- Topics begin with an assessment of prior knowledge.
- Teachers encourage self-assessment and reflection.
- Feedback is provided that links to learning targets.
- Work is recorded in Science books (KS1 and KS2).
- End-of-unit assessments and teacher judgement determine progress (below, towards, at, beyond expected).
- Judgements are recorded on school assessment system (Insight).
- Year 2 and Year 6 teachers assess against the Interim Framework.
- Annual reports include science effort and achievement.

5. Monitoring

The following strategies used by the Science Lead and SLT to monitor science teaching and learning include:

- Book scrutiny.
- Pupil voice discussions.
- Learning walks
- Data analysis to identify strengths and areas for improvement.
- Review of short-term lesson plans and resources.

6. Safety

We teach children that safety is essential in science. Risk assessments are carried out for potentially dangerous enquiries and activities. Protective equipment is available in the KS2 cupboard.

7. Review

The Science Leader reviews this policy annually.