



Be watchful. Stand firm in your faith. Be strong. Be courageous. And let everything you do be done in love. 1 Corinthians 16: 1

Science Policy

Intentions

At Pattishall CE Primary School, we believe that Science is a body of knowledge built up through experimental testing of ideas. Science is a journey of discovery which should be begun through a process of exploring the base concepts, then using the process of enquiry to understand how this knowledge can be applied. It is a theoretical and practical way of finding reliable answers to questions we may ask about the world around us.

Science in our school is about developing children's understanding of the world around them, and the practical applications of the skills they are learning – demonstrating why Science is such an important subject. We believe that a broad and balanced science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability.

Our intended impacts in teaching science include the following:

- Preparing our children for life in an increasingly scientific and technological world today and in the future.
- Helping our children acquire a growing understanding of the nature, processes and methods of scientific ideas.
- Helping develop and extend our children's scientific concept of their world.
- Building on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and developing the skills of investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Developing the use of scientific language, recording and techniques.
- Developing the use of computing in investigating and recording.
- Making links between science and other subjects.

Statutory Requirements

Statutory requirements for the teaching and learning of Science are laid out in, The National Curriculum in England Framework Document for Teaching, updated May 2015

<https://www.gov.uk/government/publications/national-curriculum-in-england-science-programmes-of-study/national-curriculum-in-england-science-programmes-of-study> and the Statutory framework for the Early Years Foundation Stage, updated June 2021.

<https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2>

Implementation

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of, 'The National Curriculum programmes of study for Science' and, 'Understanding of the World' in the Early Years Foundation Stage.

Teachers plan to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available.

Pattishall CE Primary is committed to safeguarding and promoting the welfare of children and expects all staff and volunteers to share this commitment.



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Early Years (Reception): Pupils explore science topics through making enquiries about their learning and designing their own experiments, using their senses and investigating materials and their properties. Science is taught through the strand of, 'Understanding the World'. Science teaching and learning is also linked to the other strands of The EYFS framework for learning, 2014. Teachers and teaching assistants support pupils to develop a solid understanding of things occurring around them in their day-to-day lives. Children are encouraged to be creative and inquisitive as they participate in activities. Pupils are encouraged to use their natural inquisitiveness, while taking part in exploratory play in specific scientific areas as well as areas that link across the EYFS framework.

Key Stage One (Years 1 and 2)

In Key Stage 1, Science units are taught on a two year rolling programme and are linked to class topics. This ensures progression between year groups and guarantees topics are covered. Pupils observe, explore and ask questions about living things, materials and the world around them. They begin to work together to collect evidence to help them answer questions, find patterns, classify and group objects, research using a variety of sources and carry out fair testing. Pupils use reference materials to find out more about scientific ideas. They share their ideas and communicate them using scientific language, drawings, charts and tables. Pupils often use the outdoor areas in their science learning.

Key Stage Two (Years 3-6)

Science will also be taught as discrete units and lessons where needed to ensure coverage. Children are encouraged to extend the scientific questions, exploring their understanding of the world around them and designing their own investigations. Pupils carry out a range of scientific enquiries including: observations over time, pattern seeking, classifying, grouping and researching using other sources (including computing resources). Children in Key Stage Two learn to plan science investigations by only changing one variable to make it a fair test.

Cross-curricular Science Opportunities

Teachers will seek to take advantage of opportunities to make cross-curricular links where possible. They will plan for pupils to practise and apply the skills, knowledge and understanding acquired from other curriculum areas to Science lessons.

Impact

Teachers will be able to easily distinguish the abilities of the children and confidently assess a Greater Depth pupil's work, based on their ability to use scientific language and confidently apply their base knowledge in order to design and evaluate their own experiments and investigations.

Children will demonstrate their individual ability through a free choice of investigation – they will prove they are able to use correct terminology and practically apply their learning by planning, carrying out and describing their findings.

Inclusion

Please see the Inclusion Policy

COVID-19 Addendum

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Science work was set on Class Dojo weekly. Engagement was varied and coverage was limited due to resources required for investigations. As a result of the pandemic, knowledge gaps will be filled whilst delivering the curriculum.

Monitoring of the Curriculum

The Subject Leader should be responsible for improving the standards of teaching and learning in Science through:

- Monitoring and evaluating pupil progress;
- Ensuring the quality of the Learning Environment;
- Taking the lead in policy development;
- Auditing and supporting colleagues in their CPD;
- Purchasing and organising resources;
- Keeping up to dates with changes in the subject.

The Senior Leadership Team will monitor the subject leader through the appraisal process and awareness of pupil outcomes and report to the Governing Body.

Updated by Peter May 8/7/21

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