



Westcott Church of England School

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Headteacher **Mr Barry Grace**

Westcott C of E School

SCIENCE POLICY – 2020-2022

Science is an integral and fundamental component of the whole primary curriculum. After providing a safe environment in which to learn, most primary teachers would emphasise that one of the most important aspects of their work is in helping children to investigate, explore and seek answers to questions that they may have, develop an understanding of the need to develop enquiry skills, communicate effectively through spoken, scientific, mathematical and written language as we need communication skills to equip us for everyday life.

ABOUT THE POLICY

This policy reflects the school's values and philosophy in relation to the teaching and learning of Science. It sets out a framework within which teaching and non-teaching staff can operate. It gives guidance on planning, teaching and assessment. The policy should be read in conjunction with the framework provided by The National Curriculum for Science which set out in detail the rationale for teaching each area of the Science Curriculum. The Framework for Science will give the detail of the specific skills that will be developed for the majority of pupils in each year group.

Rationale:

Science teaches an understanding of natural phenomena through the disciplines of chemistry, physics and biology. It aims to stimulate a child's curiosity in finding out why things happen in the way they do. It teaches methods of enquiry and investigation to stimulate creative thought. Children learn to ask scientific questions and begin to appreciate the way in which science will affect the future on a personal, national, and global level.

Purpose:

1. ask and answer scientific questions;
2. plan and carry out scientific investigations, using equipment (including computers) correctly;
3. know and understand the life processes of living things;
4. know and understand the physical processes of materials, electricity, light, sound, and natural forces;
5. know and understand about the nature of the solar system, including the earth;
6. evaluate evidence, and present their findings clearly and accurately.
7. complete set tasks which are open-ended and can have a variety of responses;
8. complete set tasks of increasing difficulty through the use of extension or high order thinking questions
9. use resources of different complexity, matched to the ability of the child
10. use classroom assistants to support the work of individual children or groups of children





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11. learning in mixed ability groups

12. making links across subjects and incorporating other topics into the learning process.

Our pupils should understand that:

- Curiosity is encouraged and valued; they are excited and enthusiastic when anticipating in their science lessons.
- Science is practical and hands on and children enjoy learning through exploration and questioning; they have the opportunity to use good quality resources.
- Enrichment events/school visits/workshops happen regularly.
- Progression of science skills is evident and taught throughout the school.
- Children confidently use accurate scientific vocabulary in context.
- Teachers use different assessment strategies during science lessons.
- All pupils are actively engaged in a science enquiry; using a variety of enquiry strategies, independently making decisions, answering their own questions.

Conclusion:

We use a variety of teaching and learning styles in science lessons. Our principal aim is to develop children's knowledge, skills, and understanding. Sometimes we do this through whole-class teaching, while at other times we engage the children in an enquiry-based research activity. We encourage the children to ask, as well as answer, scientific questions. They have the opportunity to use a variety of data, such as statistics, graphs, pictures, and photographs. They use ICT in science lessons where appropriate to enhance their learning. They take part in role-play and discussions, and they present reports and findings. They engage in a wide variety of problem-solving activities. Wherever possible, we involve the pupils in real scientific activities, for example, investigating a local environmental problem, or carrying out a practical experiment and analysing the results. We recognise that in all classes children have a wide range of scientific abilities, and we ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in a variety of ways:

Science Curriculum Planning:

Teachers are expected to develop their planning with the support of a variety of schemes of work, assessment materials and information sourced or created by the science co-ordinator.

Teachers are not to rely solely on this resource but use it for ideas, reference and guidance so the children can have more creative, memorable and inspiring science lessons.

All planning should be adapted to the needs of the children at Westcott CE School.



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Long term (half term) and Medium term (weekly) planning should be recorded within the relevant documents and filed.

When planning, we combine scientific study with work in other subject areas where possible. (Cross-curricular links.)

ICT should be integrated into planning when possible including use of laptops, data loggers and database software etc.

Topics are planned in science so that they build on prior learning from previous years

We ensure that there are opportunities for children of all abilities to develop their skills and knowledge in each unit, and we also build progression into our lessons shown clearly through the assessment guidelines provided by the science coordinator, so that the children are challenged as they move up through the school.

This policy is in line with the New National Curriculum, the Disability Equality Scheme, SEN, assessment, planning and marking policies.

This policy will be reviewed: Spring 2022