

Cleeve Prior C of E Primary School Science Curriculum Offer



Our vision

Our vision is to provide a caring and nurturing environment, where everyone is given opportunities to learn, discover and grow in our changing world. We will live out our

Christian values of Respect, Hope, Love, Forgiveness, Trust and Honesty and strive to guide our community into leading fruitful lives, learning from Jesus's teachings, to love themselves and one another in order to achieve success.

Teach children how they should live, and they will remember it all their life. Proverbs 22:6

Cleeve Prior Church of England Primary School – Learning and growing together in God's family.

Intent:

In order to successfully deliver a structured, rich curriculum with clear progression of skills, we teach the statutory requirements of the National Curriculum 2014 for science on a three-year rolling plan. At Cleeve Prior Primary School, our approach to teaching science is intended to support all of our children in becoming young, confident scientists; preparing them for their next stage of science learning at middle or high school, and to be able to apply their science knowledge in everyday situations in order to be successful in life beyond school. Children are supported to develop their knowledge, skills and understanding to make sense of their world. This involves providing learning experiences where pupils can explore and investigate objects and materials, learn about change and patterns, similarities and differences, and question how and why things work. All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions. Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions

Implementation:

Science is taught for 2 hours a week. This means that a whole afternoon can be spent on science, allowing staff to plan lessons in greater depth, including investigations and written explanations. As we teach mixed age year groups, topics from the National Curriculum are taught across three cycles. Topics that are repeated in both year groups (such as animals, including humans) are taught together to give children an in-depth understanding of how these elements of science are linked together. Topics that involve using our surrounding environment (such as plants) are taught in the summer term when the weather is most suitable. As a school, we make regular use of the school grounds (including the school field) and the local area throughout the year. We recognise that our surroundings offer a rich resource which can be used to inspire children and meet the requirements of the EYFS framework and National Curriculum Progression of Skills. Planning involves teachers creating engaging lessons involving high

quality science resources and equipment to aid understanding of conceptual knowledge. Teachers demonstrate how to use scientific equipment and working scientific skills in order to embed scientific understanding. Opportunities for children to use working scientific skills are included in every lesson to ensure skills are developed throughout school. New vocabulary and challenging concepts are introduced through direct teaching. Teachers use targeted questions to test/assess children's conceptual knowledge and skills.

The understanding of key ideas is built upon across the key stages. Our stimulating EYFS curriculum nurtures children's natural curiosity and on-going knowledge as children make early observations and explorations. This continues and progresses throughout KS1 and KS2. As children's knowledge and understanding increases, and they become more proficient in selecting and using scientific equipment and collecting and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.

Impact:

Science is monitored through lesson observations, book scrutinies and termly teacher assessments. Pupil voice is heard through interviews and questionnaires conducted throughout the year to evaluate the effectiveness of the curriculum and understand which techniques are found to be the most effective and enjoyable for children. There is evidence of a range of activities in our books. In KS1 learning may be evidenced by pictures in books, demonstrating knowledge children have gained or investigations children have conducted. We aim to provide practical, hands-on experiences and therefore examples of scientific skills (e.g. identifying, classifying, gathering data) may be evidenced through pictures throughout school. In LKS2, diagrams and written explanations can be found in children's books. Children may display findings from investigations in different ways such as tables, bar charts and line graphs (with support). In UKS2, children's books will show pictorial evidence, diagrams, written explanations and written investigations with predictions. Results may be displayed in tables, written conclusions and a range of graphs/charts. Oral and written feedback is regularly provided to children and misconceptions addressed as and when they arise.