Condover Church of England Primary School
Love Each Other and Know We Are Loved
Love Forgiveness Trust

Diocese of Hereford Multi-Academy Trust

Science at Condover CE Primary School

Intent

Science teaching at Condover CE Primary School aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of science, today and for the future. As one of the core subjects taught in primary schools, we intend to give the teaching and learning of science the prominence it requires.

We aim to follow the 2014 National Curriculum for Science which will ensure that all children:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific skills required to understand the uses and implications of science, today and for the future.

Concepts taught will be reinforced by focusing on the different types of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. They will also be encouraged to question the world around them, be curious about their surroundings and become independent learners in exploring possible answers for their scientific based questions.

They will be immersed in scientific vocabulary, which aids children's knowledge and understanding not only of the topic they are studying, but of the world around them.

The staff at Condover school will ensure that all children are exposed to high quality teaching and learning experiences, which will allow children to explore their outdoor environment and locality, thus developing their scientific enquiry and investigative skills. We intend to provide all children regardless of ethnic origin, gender, class, aptitude or disability, with a broad and balanced science curriculum.

Implementation

Science teaching begins in Early Years, where science is taught through the children learning about the world around them in their learning through play. In subsequent years, there is a clear and comprehensive scheme of work in line with the National Curriculum. There are also progression grids to ensure that prior knowledge, skills and vocabulary are built upon. This enables children to know more and remember more.

Science is linked to class topics and cross curricular links are made wherever possible. Where science is taught as discrete units there is a three year rolling programme to ensure progression between year groups and to guarantee topics are covered. Teachers plan to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available. At Condover CE Primary School, scientific enquiry skills are embedded in each topic the children study.

Alongside this teachers are mindful of our school Learning Values – collaboration, independence, resilience, self-motivation, creativity and confidence – and always provide opportunities for children to develop these.

Science is taught consistently, once a week for up to two hours, but is discretely taught in many different contexts throughout all areas of the curriculum. For example, through English, i.e. writing a letter to a local politician regarding the closure of a park/biography of a famous scientist's life, etc.

For each unit of study the teacher will:

- Produce a plan which outlines knowledge (including vocabulary) all children must master;
- Regularly use quick quizzes to support learners' ability to remember and understand as well as increase space in the working memory;
- Provide trips and visits from experts who will enhance the learning experience;
- Assess attainment through related topic assessment statements;

Impact

Children enjoy and are enthusiastic about science which has provided them with the foundations and knowledge for understanding the world. They retain knowledge that is pertinent to science with a real life context.

Children's work shows clear progression, a range of topics and evidence of the curriculum coverage for all science topics. Most children will achieve age related expectations in science at the end of their cohort year.

Children are increasingly independent in science, selecting their own tools and materials, completing pupil lead investigations and choosing their own strategies for recording.

Children will be able to explain the process they have taken and be able to reason scientifically.

Through various workshops, trips and interactions with experts and local charities, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity.

Co-ordinator- Kate Varley