Science Curriculum Statement

Intent

Science is a vital element in the broad and balanced curriculum that we aim to provide at Gorse Covert Primary School. Through our Science curriculum we provide opportunities to develop children's curiosity, enthusiasm, understanding and appreciation for the wonders of the world that we live in.

As a core subject, Science at Gorse Covert Primary School aims to ensure that all pupils:

- 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
- Be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Importance of Science

Over many years, Science has changed the way in which we live our lives and it is fundamental to the world's future prosperity. The Science curriculum at Gorse Covert Primary School promotes a natural curiosity about the universe in which we live. It allows children to ask questions about the world that they live in and encourages them to be inquisitive throughout their learning. Throughout the programmes of study set out in the national curriculum, children will acquire and develop their knowledge and understanding of key learning that has been identified within each unit and across each year group. The Science curriculum is designed for children to acquire key learning objectives through practical and real life experiences. This includes using equipment, conducting investigations, building personal opinions and explaining concepts with confidence. Following the schools 3 C's (confidence, curiosity and community) plays a vital role throughout the implementation of the Science curriculum.

Science in Early Years

Children at Gorse Covert Primary School join the school with a keen curiosity that is nurtured and challenged to give children the confidence to explore and investigate scientifically. Staff recognise that children are competent, creative thinkers and they shape questions and provide continuous and enhanced provision to encourage children to investigate, ask questions and explain their findings.

Implementation

As a school we ensure that all children have access to the knowledge as identified in the National Curriculum. Lessons are planned around the objectives set out in the curriculum and teachers ensure that there is plenty of opportunity for children to experience the skills required for the development of scientific enquiry.
The children will have the opportunity to experience a range of equipment specific to their taught units of work and will complete investigations using such equipment. Staff are encouraged to ensure that they have all the appropriate equipment prior to teaching a unit of work. All classes have their Science lessons timetabled in on a weekly basis. Years 1 and 2 follow objectives in succession through a unit of work

whereas children from Year 3 to Year 6 are taught the appropriate objectives following an interleaving approach. The trial of this approach is to identify if it supports working memory with re-cap of prior knowledge to continuously deepen knowledge.

Management of Science

Governors and the Headteacher will ensure:

- That Science is taught as part of the schools basic curriculum, following the objectives set out in the National Curriculum.
- All pupils make progress in achieving the learning objectives of the Science curriculum.
- The subject is well led and effectively managed and that standards and achievement in Science and the quality of the provision are subject to regular and effective self evaluation.
- Teachers are aware of Science's contribution in developing pupils' understanding of the world in which we live.

The STEM team will monitor and evaluate Science throughout the school.

Our Science Curriculum

Each year group will learn about the units of work specific to them with scientific enquiry based learning being embedded throughout all lessons. In addition to this, work on seasonal change will run alongside all other topics and will be taught at different points throughout the year.

Impact

Assessment

In Science we make informal judgements as we observe the children during lessons and in the work they have completed. Once the children complete a unit of work, we make a summary judgement of the work for each child as to whether they are working towards the expectation, are working at the expectation or are exceeding the expectation for their specific year group. Teacher's assessment notes are recorded in their own assessment files and are used to plan future work. These assessment notes are also used to pass onto the next teacher at the end of a school year. During monitoring sessions, children will be able to look through their Science books as a prompt to the learning that they have completed or to remember any subject specific vocabulary they should have come across or learnt.

Here at Gorse Covert Primary School, we strive to ensure that most of our children achieve the age related expectations by the end of each year group and that many children have exceeded age related expectations. Where possible, teachers are encouraged to think creatively about ways in which children acquire their new learning and about finding ways that children working below age related expectation can develop their Scientific knowledge in different ways or through other subjects. For children to achieve age related expectations, books must show evidence of scientific vocabulary, knowledge specific to each topic and evidence of scientific enquiry throughout each unit of work.