North Cerney C of E Primary School



Science Curriculum Statement

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1. INTENT

At North Cerney, one of the values underpinning our school vision is curiosity. This is key in science, where we aim to foster curious, enquiring minds and provide the means with which pupils can seek answers to their own questions.

We teach specific scientific concepts alongside skills and knowledge which will help them to think and act scientifically. We aim to develop an understanding of the uses and implications of Science, today and for the future.

Our science is planned carefully on a 2-yearly cycle so that the requirements of the National Curriculum are taught at an age-appropriate stage, with scientific topics revisited and developed throughout their time at school so that they can build on and deepen their understanding over time.

2. IMPLEMENTATION

Individual teachers plan their science based on a variety of resources but linked to the units from Rising Stars 'Switched on Science'. Sessions takes a practical and investigative approach to learning, whilst also ensuring that misconceptions are addressed and correct vocabulary is embedded in learning. The sessions are taught in topic blocks over a series of days and often linked with history or geography topics.

Pupils are encouraged to continue their learning in their own time and plans are in place to take part in the science fair held annually at Fairford. National Science week activities in the spring term also foster independent learning.

Wren Class

In the early years, science is very much part of the children's experiential learning. They are encouraged to observe, question and suggest possible answers.

In years 1 and 2, science is taught as specific subject area within the context of their topic learning. This means that they will visit different areas of the science curriculum during each term in order to make this learning meaningful in relation to other concepts and experiences. Knowledge and understanding is taught alongside relevant vocabulary and pupils are encourage to engage in practical and investigate activities to begin to experience how a scientist works.

Careful questioning ensures that misconceptions are addressed and pupils are encouraged to deepen their conceptual understanding

Kingfisher Class

Lessons include a mix of teaching (knowledge and understanding) and practical investigative activities. Within lower Key Stage two first hand experience and practical examples are incorporated with the theoretical aspect to make the connection for those children who still need the practical reinforcement of understanding.

Pupils are encouraged to suggest their own ways of finding answers to questions they have posed, including carrying out fair testing, recording, interpreting and drawing valid conclusions. They are also encouraged to share their findings in different ways either individually or as a group.

Owl Class

Lessons include a mix of teaching (knowledge and understanding) and practical investigative activities. Throughout the year topics are revisited from prior learning in lower KS2 and KS1 to recap and extend their understanding.

Pupils are encouraged to suggest their own ways of finding answers to questions they have posed, including carrying out fair testing, recording, interpreting and drawing valid conclusions. They are also encouraged to share their findings in different ways incorporating the mathematical aspect of data handling.

3. IMPACT

Our Science Curriculum is high quality, well thought out and is planned to ensure progression in both knowledge and skills. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes (key performance indicators);
- Tracking of knowledge in post learning assessments;
- Pupil discussions about their learning;

The subject leader monitors impact by book scrutiny, discussions with pupils and lesson observations.

As a result, our pupils are enthusiastic, confident and competent scientists, ready to engage with and question the world around them, making sense of their experiences by recognising links with the concepts they have learned at school.