



ST. NICHOLAS SCHOOL CHILD OKEFORD

A CHURCH OF ENGLAND VOLUNTARY AIDED PRIMARY SCHOOL

Mission Statement

Exploring Possibilities Together

Love one another, as I have loved you

John 13:34

SCIENCE POLICY

POLICY SUMMARY

At Child Okeford School our curriculum has been designed, planned and organised to promote our core aim: to develop happy, well rounded, confident individuals who achieve their potential as a result of a wealth of experiences.

POLICY DATE: July 2022

REVIEW: July 2024



Intent

At St Nicholas Primary School, we place a high value on our science curriculum and ensure it is recognised and delivered as a core subject. Science at our school will stimulate the minds of our children, encouraging curiosity to give them a deeper understanding of the world using an enquiry-based approach.

We follow the 2014 national curriculum key stages 1 and 2 'aims' for science 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
- are equipped with the scientific skills required to understand the uses and implications of science, today and for the future. We understand that it is important for lessons to have a skills-based focus, and that the knowledge can be taught through this.

It is our intent, at St. Nicholas, to develop 'life-long scientists' in our pupils by developing transferable skills such as curiosity, observation and critical thinking. We intend for science lessons at St. Nicholas to be accessible for all pupils and to provide children with hands on learning experiences that create a sense of awe and wonder; in turn, we hope that science is a subject loved by all. Our science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group, as well as the application of scientific skills. We ensure that the 'Working Scientifically' skills are built-on and developed throughout children's time at the school so that they can apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently and continue to ask questions and be curious about their surroundings.

Implementation

Teachers and support staff create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. Our whole school approach to the teaching and learning of science involves the following.

- Fun and engaging science lessons will be planned using the Cornerstones platform whereby a 3 year rolling cycle is followed. Teachers use their professional judgement to develop the Cornerstones planning further as they feel fit, for example if they recognise gaps in learning or further learning opportunities.
- Science learning is always linked to each class' termly project (and/or companion project).
- Children will work into their project books and the teacher will record class-based work in floor books. Photographs of children carrying out experiments and experiencing 'awe and wonder' moments will be recorded in books and class displays.

- Children will use a range of relevant and up to date resources to develop their knowledge and understanding that is integral to their scientific learning.
- Children will be encouraged to develop their curiosity and interest in the world around them by asking questions. Curiosity will be celebrated in our school.
- Children will be given the opportunity to build on prior knowledge and link ideas together allowing the achievement of greater depth knowledge.
- Teachers will use precise questioning in class to test conceptual knowledge and skills, and assess pupils regularly to identify those children with gaps in learning, so that all pupils keep up.
- Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching.
- Classrooms will have a discrete science display. This will help children retain key scientific facts from current and previous projects.
- Children will be offered a wide range of extra-curricular activities, visits, trips and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge being taught in class.
- Teachers will regularly plan to use the outside spaces at our school (such as the Nature Area) to enhance learning, making it more memorable and relevant.
- Whole-school events, such as Science Week, will allow all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills.

Impact

- Elicitation tasks carried out at the start of a science topic will show what children already know. This is added to in purple pens at the end of the topic to show what knowledge they have acquired
- Working scientifically skills are assessed termly showing progression of key scientific skills
- Children and staff will speak positively about science, demonstrated through pupil/staff voice feedback.
- Children will be able to recall a number of fun experiments and science experiences from their time at school so far.
- Children will show confidence in believing that they will achieve in science.
- Termly learning walks to ensure the subject leader is clear of the learning taking place across the school.
- Termly book scrutiny to check the coverage of the curriculum and the impact of the marking policy.
- Collaborative work with other science leads to ensure a consistent approach to science teaching and learning.