



Science

Intent

At Burford School we strive to develop knowledgeable scientists who are curious and work scientifically to develop their understanding about the world around them.

We work to ensure that children are confident with the National Curriculum statements. We enable children to develop their skills when working scientifically and using simple scientific equipment. We provide children with opportunities to develop their curiosity and ability to question and link their scientific knowledge to the world around them. Children are given many opportunities to develop their science capital and love of science.

Implementation

Science is a core subject and is valued as such at Burford. Key Stages 1 and 2 follow the 2014 National Curriculum, whilst Nursery and Reception follow the EYFS – Understanding the World.

'Working Scientifically' skills, outlined in the National Curriculum, are embedded within lessons. Children will develop skills in different types of enquiry, including observing over time, pattern seeking, identifying, classifying and grouping, comparative and fair testing and researching using secondary sources.

Snap Science

In 2021-22, we introduced the Snap Science scheme of work throughout the school. Snap Science is an enquiry-based scheme of work, which gives the children the opportunities to develop their 'working scientifically' skills alongside their curriculum knowledge. Science is a spiral curriculum, which allows children to build on their skills and knowledge as they progress throughout the school.

There are different stages of our lessons which allow consistency and continuity across year groups from Years 1 – 6:

Starter

Starter activities such as Big Question, Odd One Out and Concept Cartoons, are used to promote curiosity, scientific thinking and assess children's current knowledge. The starter may be used to recap prior learning or may be a 'hook' to introduce a new topic.

Introduction

Children are shown the learning intention for the lesson and are also shown how they will be working scientifically and which enquiry type they will be using. We also discuss how we are using our Burford Bodies in that particular lesson.

Explore

Children are introduced to the lesson, building on their prior learning from previous lessons in the unit. Concepts are taught through a variety of methods, using a range of resources.

Enquire

During the 'Enquire' section, children apply what they have learnt. Often, this will involve practical resources, outdoor learning or research using digital resources. Investigations usually have a meaningful context to link scientific learning to real world experiences. Where possible, teachers plan for cross-curricular links with other areas of the curriculum.

Reflect and Review

The last stage gives children the opportunity to discuss what they have learnt and to address any misconceptions that have arisen during the 'Enquire' section. Informal assessment of the children's understanding helps to inform future planning.

In all practical lessons, children are made aware of the hazards and risks and encouraged to take responsibility for their own health and safety during practical work. Adults may refer to the '**Be Safe**' booklet, produced by The Association for Science Education. We are also members of CLEAPSS, which provide support for primary schools.

Assessment

Both summative and formative assessment strategies are used throughout the year to accurately record children's progress and attainment. End of unit assessments are used to record the children's subject knowledge and ongoing formative assessments in lessons are made to identify their ability to work scientifically. Parents will be informed if their child is working within or towards the expectations of their year group in the summer report.

In the Foundation Stage, Understanding the World is assessed formatively throughout the year and a summative assessment is made for the Foundation Stage Profile at the end of the year.

Outdoor Learning

Outdoor learning is encouraged and valued as part of our science provision for the whole school. Children in Nursery, Reception and Year 1 are able to participate in weekly Forest School Sessions during the Autumn and Summer terms.

Extra-Curricular opportunities

We run many different school trips linked to the children's learning in Science. Previous trips have included visiting The Lookout Discovery Centre, Woolley Firs and Science Oxford.

STEM week is a highlight in our school calendar. We aim to develop children's curiosity and love of Science, show that Science is highly valued throughout the Burford community and to develop links between different subjects. During STEM week, children take part in a selection of workshops and we invite parent speakers to talk to the children about their jobs in STEM areas.

Impact

The impact of our science provision should show that each year children have a good understanding of the science curriculum for their year group (ready to build upon in future years). They will also have developed their skills when working scientifically and will be able to ask questions and develop their independence when investigating answers.

We aim for children to be enthusiastic and show a love of, and interest in, science.

Science is monitored by the science coordinator, throughout the year, including pupil voice surveys, book looks and lesson drop ins, where the impact of our science provision is evident. These monitoring processes allow our provision to be evaluated and developed.