One Community, Many Cultures; Growing and Learning Together

Curriculum Overview

Science

At Gosford Park we have designed a curriculum for our community that aims to equip them with the tools they need to succeed in the next stage of their development, whilst nurturing curious learners who are responsible members of the local, national and global community.

Intent

Science is taught in an engaging and purposeful way at Gosford Park Primary School, where pupils learn by linking new knowledge and skills to those previously learned. At Gosford Park we recognise the importance of Science in everyday life. As one of the core subjects, we aim to give Science the prominence it requires.

LTP with History and Geography

Learning in Science prioritises the increasing of children's knowledge and understanding of the world. Scientific skills and concepts are developed through a process of enquiry and observation. We aim to develop the natural curiosity of our children, the confidence to question a process or theory, a respect for living organisms and the environment. We also provide opportunities for the children to critically evaluate the evidence presented to them or gathered through their own enquiries.

From investigating the optimum conditions for plant growth, to our place in space, the primary science curriculum sows the seeds for the next generation of agriculturalists to astronauts - electricians to evolutionists. The science curriculum is taught in a practical and engaging manner, allowing time for self-discovery of the fundamental scientific concepts.

Implementation

We use a variety of teaching and learning styles in our science lessons. Our principal aim is to develop children's knowledge, skills, and understanding. Sometimes we do this through whole-class teaching, while at other times we engage the children in an enquiry-based research activity. We encourage the children to ask, as well as answer, scientific questions. They have the opportunity to use a variety of data, such as statistics, graphs, pictures, and photographs. They engage in a wide variety of problem-solving activities. Wherever possible, we involve the pupils in real scientific activities, experiments and analysing the results. As much as possible, children will be given opportunity to develop their scientific skills through practical investigations and analysis of the results. Children will learn and practise fair test experiments, classification, identification, observation (observation over time), pattern seeking and will also have chance to free exploration of their ideas and time to talk about them.

The order in which the units are taught through Key Stage 1 and 2 has been planned in line with the National Curriculum while, where possible, also linking to their current English and Topic units. Teachers plan well sequenced lessons that progressively build understanding over time. Progression documents for skills ensure that our pupils are challenged to achieve the best outcomes.

Where appropriate, cross-curricular links are made with other subjects to reinforce and enhance pupils' scientific understanding.

Progression document

Impact

Our coherent approach and engaging activities encourage children to be inspired by their encounters with science at Primary school. Primary science should develop pupils' understanding of the world, nurture their curiosity and teach essential skills, including enquiry, observation, prediction, analysis, reasoning and explanation.

In a world increasingly shaped by science and technology, primary schools play a pivotal role in fostering the next generation of innovators and informed citizens. High-quality science education lays the foundation for our future, equipping young learners with the knowledge, skills, and attitudes to tackle tomorrow's challenges.

With a focus on vocabulary and enquiry skills, pupils develop their scientific understanding and practice, resulting in a better understanding of the world around them.

Retrieval practice is also a key feature of Science lessons at Gosford Park; encouraging pupils to know more and remember more. This frequent reference to previous knowledge ensures that pupils identity links to previous learning and build upon existing skills.

Due to an enriched curriculum, delivered by confident teachers through engaging and inspiring lessons, children at Gosford Park acquire the skills and knowledge needed to think and act like scientist. Children understand the importance of science, confidently develop their own skills and as a result, enthusiastically investigate and create their own investigations.

Enrichment

Over their time with us at Gosford Park, pupils are given the opportunity to explore a variety of scientific investigations and experiments and are introduced to a range of scientists. External providers come in to school to work with specific children; pupil premium, SEND or Greater depth. Children have opportunities participate in Extra Curricular Science clubs. We are also going to be making use of outside providers to provide engaging assemblies and some spectacular workshops throughout the year.

Are you a keen scientist?

Here are a few local sites where you can discover more about Science in Coventry and the surrounding areas.

- Thinktank Birmingham
- National Space Centre - Lesicester
- Stemtastic Explorers – Coventry Transport Museum