



Intent, Implementation, and Impact of Science

Four Swannes Primary School

Intent

At Four Swannes Primary School, we aim to teach our children the methods of enquiry and investigation to stimulate creative thought. Children will learn to ask scientific questions and begin to appreciate the way science will affect their future on a personal, national and global level.

In conjunction with the aims of the National Curriculum, our Science teaching offers opportunities for children to:

- Develop their scientific knowledge and understanding
- Develop their investigation and curiosity skills
- Develop their explanatory and communicative skills
- Work both collaboratively and independently on a variety of scientific tasks
- Develop an understanding of how to work safely and to take increasing responsibility when managing their own investigations.
- Learn and use scientific vocabulary correctly.

We aim to deliver the National Curriculum in a way that is appropriate to the needs and interests of all the pupils and challenge them to fulfil their potential. Our aim is to develop children's scientific skills and vocabulary through the teaching of subject specific content. We expect our teachers to do this through whole-class teaching, while at times we engage the children in an enquiry-based research activity. Teachers demonstrate how to use scientific equipment and the 'working scientifically skills' to embed scientific understanding. We encourage children to ask, as well as answer, scientific questions.



Implementation

We recognise that there are children of widely different scientific abilities in all classes and we ensure that we provide suitable learning in all classes and we ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in a variety of ways by:

- Setting common tasks which are open ended
- Providing resources of different complexity
- Differentiated activities
-

The school uses the national curriculum as the basis of its planning. There is also a strong emphasis on 'outdoor learning' especially in EYFS and KS1. The science long term plan maps the scientific topics studied in each term during the key stage. The science subject lead works this out in conjunction with teaching colleagues in each year group to ensure coverage of the key objectives. The medium term plan gives an overview of each unit of work for each term. The class teacher is responsible for writing plans for each lesson. These plans are recorded on a specific lesson Performa which is split into the 5E's:

- Engage - use explorify and discuss a question linked to lesson
- Explore - share what they already know/recap on prior learning
- Explain - teach new subject knowledge and scientific vocabulary
- Elaborate - investigate/explore further - photo evidence
- Evaluate - record what they have learnt - tasks will be differentiated according to ability (Bronze/Silver/Gold).
-

These plans also highlight the specific learning objectives and scientific vocabulary required for each lesson. Topics in science build upon prior learning. We ensure there are opportunities for children of all abilities to develop their skills and knowledge in each unit.

Impact

The successful approach at Four Swannes results in a fun and engaging science education that provides children with the foundations for understanding the world. Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them. Pupil voice is used to further develop the Science curriculum, through questioning of pupil's views and attitudes to Science to support the children's enjoyment of Science and to motivate learners.