



Queensway Infant Academy and Nursery

Curriculum Intent for Science

Intent

At Queensway Infant Academy we aim to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of the uses and implications of Science, today and for the future.

Science in our school is about developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills. Staff at Queensway Infant Academy ensure that all children are exposed to high quality teaching and learning experiences, which allow children to explore the outdoor environment and the locality of Barnham Common and surrounding areas, these opportunities provide scientific enquiry and investigative skills to be developed.

All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions. At Queensway Infant Academy we are developing specialist vocabulary in line with the topics we teach, this aids children's knowledge and understanding not only of the topic they are studying, but of the world around them. Through immersing the pupils in scientific vocabulary we are enabling the pupils to use a variety of approaches to answer relevant scientific questions through a broad and balanced science curriculum.

Implementation

In ensuring high standards of teaching and learning of Science, we have implemented a curriculum that is progressive throughout the whole school. Science teaching at Queensway Infant Academy involves adapting and extending the curriculum to match all pupils' needs. Where possible, Science is linked to class topics. Science is taught as discrete units and lessons where needed to ensure coverage.

We are continually reviewing the delivery of science lessons to ensure all children are provided with rich learning experiences and are combining what we already have in place with the knowledge based curriculum following the recommendations from EMAT that aim to:

- Prepare our children for life in an increasingly scientific and technological world today and in the future.
- Help our children acquire a growing understanding of the nature, process and methods of scientific ideas.
- Help develop and extend our children's scientific concept of their world.

- Build on our children's natural curiosity and developing a scientific approach to problems.
- Encourage open-mindedness, self-assessment, perseverance and developing the skills of 3 investigation – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Develop the use of scientific language, recording and techniques.
- Develop the use of maths in investigating and recording.
- Make links between science and other subjects.
- Trips and visits from experts who will enhance the learning experience. At Queensway Infant Academy we celebrate National Science Week in March and work closely with the local high school to present a Science morning to our families and to showcase all the wonderful things we have achieved in Science.

Science is taught consistently, once a week for up to two hours, but is discretely taught in many different contexts throughout all areas of the curriculum. We have also implemented an assessment sheet where teachers track the achievements and progress throughout a topic and this is reviewed on a termly basis to ensure clear progression and children's new found knowledge and understanding. This approach then allows for teachers to plan future opportunities to enable the children to articulate scientific concepts clearly and precisely, assisting them in making their thinking clear, both to themselves and others.

Impact

Our Science Curriculum is developing in terms of it being well thought out and is planned to demonstrate progression. The impact and measure of this is to ensure children not only acquire the appropriate age related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.

All children will have:

- A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills.
- A richer vocabulary which will enable to articulate their understanding of taught concepts.
- High aspirations, which will see them through to further study, work and a successful adult life.