Science at Queensway School



At Queensway, we recognise that in an increasingly scientific and technological age children need to acquire knowledge, skills and attitudes to better prepare them for modern life.

Young children are naturally curious and passionate about learning. At Queensway we provide a stimulating science curriculum that nurtures children's natural curiosity and their on-going intellectual development. Through a hands-on, inquiry-based curriculum, children will experience the joy of having wonderful ideas, exploration and investigation – that is, the joy of finding out.

Real-life experiences are a fundamental part of our approach and members of the community are regularly invited in to share their experience and expertise. We draw upon strong links with Banbury Space Academy to facilitate hands-on science experiences which inspire and develop challenge. Similarly, we engage our pupils with exciting school trips and visitors to enhance the curriculum.

At Queensway there is a whole school ethos of understanding and caring for the world around us and an understanding of our responsibility towards both the immediate and wider environment and community. This is demonstrated our well-attended Eco-club, involvement in community projects such as 'Banbury in Bloom' and annual science days. The annual science day is carefully chosen to boost the profile to science across all key stages.

We recognise that the school grounds offer a rich resource which we can utilise to inspire and effectively meet the requirements of the EYFS Framework and National Curriculum Programmes of Study. Our dedicated team of teachers deliver weekly science lessons by following a clear long term plan. Our science progression of skills document provides a clear overarching framework from which teachers can plan well-sequenced and differentiated lessons. The science leader is responsible for careful monitoring of planning, resources and ensuring staff are equipped to plan and deliver lessons confidently.

In Foundation Stage, Science is taught through the 'Understanding of the World' section of the Early Years Foundation Stage curriculum and aims to develop children's curiosity and passion for science and general team working skills. Science at Queensway is introduced indirectly through activities that encourage every child to explore, problem solve, observe, predict, think, make decisions and talk about the world around them. These activities are delivered in numerous ways, for example through Continuous Provision, Enhanced Provision ('Busy Birds' time), Teacher-led inputs (whole class and in small groups) and Spontaneous Learning. This allows children who have a natural interest to develop their questions and observations through child- led learning, with adults following their lead and providing additional opportunities to explore ideas further. This might allow adults to begin to identify some children who might go on to be a Most Able child in science, in addition to those who may need the greatest support.

At Queensway, children in both Nursery and Reception are able to develop their scientific skills through exploring the following areas within the Foundation Stage provision:

- water tray
- sand pit
- bug hunts
- construction area, investigation station
- · curiosity cube
- growing area
- mud kitchen
- sound station
- small world
- windy day resources
- a wide variety of non-fiction texts available.

These areas and activities are available to the children in their classrooms, both inside and outside. Foundation Stage children can:

Nursery	Reception
 Comment and asks questions about aspects of their familiar world such as the place where they live or the natural world Talks about why things happen and how things work Developing an understanding of growth, decay and changes over time Shows care and concern for living things and the environment Begin to understand the effect their behaviour can have on the environment 	 Looks closely at similarities, differences, patterns and change in nature Knows about similarities and differences in relation to places, objects, materials and living things Talks about the features of their own immediate environment and how environments might vary from one another Makes observations of animals and plants and explains why some things occur, and talks about changes

By the end of Foundation stage, we want our children to be able to:

Statutory ELG: The Natural World

Children at the expected level of development will:

- Explore the natural world around them, making observations and drawing pictures of animals and plants.
- Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.
- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.