

SCIENCE POLICY



EXCEEDING EXPECTATIONS

This policy will be reviewed February 2019

Warwick Road Primary School



Science Policy

Our children are born into a changing and increasingly uncertain world. At Warwick Road, we are committed to helping our children prepare for adulthood in a future in which many traditional careers are replaced by automation and expert systems. New, perhaps currently unknown, skills will be required of future generations and a thorough grounding in science and scientific thinking is an extremely important part of preparing them for that future.

As is the case with all we do at Warwick Road, however, we begin with the child.

Children are naturally fascinated by everything in the world around them. They learn by playing and as they do so, they constantly pick up information about what they see, touch, smell, taste and hear and begin to form the ideas which will help them make sense of it all. In the process, they come to conclusions to account for the experiences they have had. By encouraging them to take a second, more careful, look at the world, teachers can help children begin to test their ideas and formulate new questions about what they see and hear around them.

From the earliest stage of education, children can be encouraged to explore and observe, group objects and events and look for similarities and differences. As they move forward through school, they will learn to measure and record the things they have found out and discuss their findings with the aim of understanding how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims: The national curriculum for science aims to ensure that all pupils:

- develop lively, enquiring minds and the ability to question.
- learn scientific skills and knowledge.
- build on their natural curiosity and enable them to understand and care for the world in which they live.
- are provided with an environment where they can work in an investigative way and can communicate their findings in a variety of ways.
- Can use equipment safely and sensibly.
- develop the potential scientific links with all other areas of the curriculum.
- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.

- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Science and the National Curriculum

At Warwick Road Primary School we base our teaching on the National Curriculum Programmes of Study to ensure that there is continuity and progression.

The National Curriculum document for Science sets out a clear, full and statutory requirement for all children. It determines the content of what will be taught, and sets attainment targets for learning. The programmes of study set out what should be taught at Key Stage 1 and 2 and The Foundation Stage programmes of study for Understanding of the World are set out in the EYFS.

The EYFS in Reception sets out the learning objectives for the seven areas of learning:

- Physical Development
- Expressive Arts and Design
- Personal, Social and Emotional Development
- Literacy
- Understanding of the World
- Communication and Language.
- Mathematics

The EYFS aims to give the children knowledge and skills so they can begin the National Curriculum.

National Curriculum Years

Science is taught as a discrete lesson and as part of cross-curricular themes when appropriate. Science has links with other areas of the curriculum including Geography, English, Numeracy, Art and Design Technology. The programmes of study describe a sequence of knowledge and concepts. While it is important that pupils make progress, it is also vitally important that they develop secure understanding of each key block of knowledge and concepts in order to progress to the next stage.

Pupils should be able to describe associated processes and key characteristics in common language, but they should also be familiar with, and use, technical terminology accurately and precisely.

They should build up an extended specialist vocabulary. They should also apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data.

Assessment

Assessment in Science is based upon scientific knowledge and understanding, rather than achievement in English or Mathematics. In the Foundation Stage we assess children's knowledge and understanding according to the EYFS Learning and Development Stages.

In KS1 and KS2 we use a range of assessment materials to ensure that children are making appropriate progress, including assessment tasks. Pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Assessment should:

- Be formative and summative
- Be used to inform the teacher for future planning
- Promote continuity and progression
- Form the basis for reporting to parents
- Be based on observation, participation and written outcomes

Recording

Children's recording will take many forms according to the nature of the activity:

- Verbal
- Pictorial
- Diagrammatic
- Graphical
- Written
- Symbolic
- Computing- bases
- Photographic

This policy reflects current practise in Warwick Road Primary School at the time of writing. It should be reviewed in conjunction with SLT, in spring 2019.