

WOOTTON BASSETT INFANTS' SCHOOL

SCIENCE POLICY

Introduction

Science teaches an understanding of natural phenomena. It aims to stimulate a child's curiosity in finding out why things happen in the way they do. It teaches methods of enquiry and investigation to stimulate creative thought. Children learn to ask scientific questions and begin to appreciate the way science will affect their future on a personal, national and global level.

Aims and Objectives

Science at Wootton Bassett Infants' aims to enable children to:

- Be observant, curious and caring about our environment;
- Work individually and cooperatively, listening to, and valuing, the opinions of others;
- Can observe, question, hypothesise, plan, measure, construct a fair test, evaluate and communicate conclusions;
- Begin to know and understand the life processes and living things;
- Begin to know and understand materials and their properties;
- Begin to know and understand physical processes.
- Communicate their knowledge and understanding in a variety of ways

Science Curriculum Planning

Science should be taught weekly and as appropriate to the age and needs of the children. This is sometimes as a discrete lesson but usually as an integrated element of the on-going topic work. All children will be provided with a wide variety of opportunities and contexts in which to develop their science skills as well as extending their capabilities in other areas of the curriculum. They will be using and developing language, using mathematical skills such as measuring and data handling, and may involve many other areas such as art, drama, music, technology and ICT. Opportunities for children to apply their learning outside the science lessons are encouraged and cross curricular links are made wherever possible. Purposeful speaking and listening in science is encouraged.

Science at Wootton Bassett Infants is taught through the scheme of work 'Collins- Snap Science' and 'Hamilton Trust'. To ensure coverage and progression of the expectations of the National Curriculum we have developed a 2 year curriculum map involving objectives we want the children to cover during their time with us. Weekly lessons are planned so that children can build on previous skills learnt and develop new skills.

Foundation Stage children are taught the science elements of The Foundation Stage document through the early learning curriculum: Understanding the World- The World. The content emphasis for each term links to the class themes and includes breadth and balance of science concepts over the year. Provision in the Foundation Stage will allow children

continuous opportunities to investigate their surroundings and these will be observed and recorded by adults in their setting to provide evidence as part of Understanding the World.

Teaching and Learning Style

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 children in an enquiry based research activity. We ask children to ask as well as answer scientific questions.

We recognise that there are children of widely different scientific abilities in all classes and we provide suitable learning opportunities for all children 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 and can have a variety of responses.
- Setting tasks of increasing difficulty (we do not expect all children to complete all tasks).
- Grouping children by ability and setting different tasks for each ability group.
- Providing different resources, matched to the ability of the child.
- Using TAs to support the work of individual children or groups of children.

Assessment and Recording

We assess our children by talking to them and asking questions (open and closed) during the lesson. We look at their work and observe children carrying out practical tasks. At the end of each term, KS1 teachers will make a judgement using an assessment sheet which teachers will highlight against statements from the national curriculum as to whether the child is working towards, working at expected or working beyond the national standards. The science topic for each term is documented on the child's Sample of Work books and we pass these onto the next teacher. At the end of KS1, Year 2 teachers have to submit a teacher assessment. Staff look at evidence of children's learning in science and moderate the work together. Foundation Stage class teachers assess their children against Understanding the World early learning goal and record their attainment in the Foundation Stage Profile.

Resources and Equipment

Within school resources and equipment are continuously being developed and extended. The resources for science are stored centrally in the new build. There are also a number of science topic books in the library to support research. All classrooms have science software installed and all laptops and classroom computers can access the internet for on-line resources.

Equal Opportunities in Science

Scientific work of an appropriate level will be made available to each child, without prejudice, whatever the age, ability, sex or ethnic origin.

Teaching methods and styles take account of the diversity of pupils.

Our multicultural policy ensures that the principles and practice of diversity and race equality are integrated into teaching and learning.

Health and Safety

Teachers are aware of risks involving:

- Handling glass
- Hot water and hot objects to be handled with care
- Knives and scissors handled with care
- Children with food allergies

For full details refer to the schools Health and Safety document.

