



Pikes Lane Primary School Science Statement of Practice

LEADING SCHOOL | LEARNING SCHOOL | INCLUSIVE SCHOOL | HEALTHY SCHOOL | EXTENDED SCHOOL | REFLECTIVE SCHOOL

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Linked Governor Sub Committee: Mr Abdullahi

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Science Statement of Practice

Introduction

Science is an important part of the curriculum as it encourages, at an early age, an interest in and responsibility for self, other life forms and the environment. The teaching of Science provides opportunities to discover answers and satisfy curiosity as to how things work, in a stimulating and enjoyable environment.

Aims

At Pikes Lane Primary School, we aim to:-

- promote effective observation, questioning, experimentation, reasoning and communication whilst developing co-operative skills
- encourage attitudes of curiosity, originality and independence of thought
- provide opportunities to respond to the challenge of a problem
- satisfy curiosity by providing a bank of knowledge
- provide opportunities to review work and discuss ways to improve learning
- encourage understanding, and effective use, of scientific language
- develop scientific concepts and their application to everyday life
- help pupils to recognise that scientific ideas contribute to developments in technology, and to examine their impact on society
- nurture in children the 'awe' of science.

Early Years Foundation Stage (Understanding the World)

Children should have the opportunity to find out and learn about the world in which they live. Their experiences are likely to have included:

- asking questions about why things happen
- investigating a wide variety of objects and materials in the natural and man made world
- learning about themselves and living things
- looking closely similarities and differences, patterns and change
- talking about their observations and sometimes recording them.

KS1 and KS2

During KS1 pupils observe, explore and ask questions about living things, materials and phenomena.

- They begin to work together to collect evidence to help them answer questions and to link this to simple scientific ideas.
- They evaluate evidence and consider whether tests or comparisons are fair.
- They use reference materials to find out more about scientific ideas.
- They share their ideas and communicate them using scientific language, drawings, charts and tables.

During KS2 pupils learn about a wider range of living things, materials and phenomena.

- They begin to make links between ideas and to explain things using simple models and theories.
- They apply their knowledge and understanding of scientific ideas to familiar phenomena, everyday things and their personal health.
- They begin to think about the positive and negative effects of scientific and technological developments on the environment and in other contexts.
- They carry out more systematic investigations, working on their own and with others.
- They use a range of reference sources in their work.
- They talk about their work and its significance, and communicate ideas using a wide range of scientific language, conventional diagrams, charts and graphs.

National Curriculum Requirements

The updated National Curriculum sets out the statutory requirements for the teaching of Science in Key Stage 1 and Key Stage 2.

Teachers should cover and assess the pupils' knowledge and understanding in each topic within the programmes of study during and/or at the end of each topic.

Planning

Medium term planning should outline what is to be taught.

Short term planning should be detailed and should take into account the needs and abilities of the children. It should include:

- The learning objective (WALT), which should be skills based.
- Pupil activities, including differentiated activities
- Resources, including use of ICT as appropriate
- Any safety issues

'Working scientifically' should be an integral part of planning and teaching each topic.

Assessment, recording and reporting

Teachers should continually assess pupils' progress throughout the school year in order to inform future planning and to maintain continuity and progression. They assess the progress of pupils during and/or at the end of each unit of work. Their progress is also recorded formally at the end of the school year, on a whole school assessment tracker. Judgments will be made for each child, based on whether that are working at age related expectation, or whether they are below or above this.

Pupil's progress is reported to parents via the annual written report and also during the annual parent/teacher meeting.

Discreet Science tasks will be recorded on task sheets, marked according to school policy and will be kept in red Science folders.

Science tasks, that link with thematic units, will be recorded in theme books.

Resources

There is a wide range of: work-cards and books (Ginn Star Science, Collins Science, Letts, etc.), photocopyable resources, videos and computer programs available to support pupils' learning in

Science. There is a wide range of equipment for use across the Key Stages to support teaching and learning in each area of Science.

Cross Curricular Links

Depending on the science topic it can be taught as a block unit or as part of theme. If links are difficult to make between Science units and thematic units, then Science should be taught discreetly.

ICT

Pupils are encouraged to use ICT to enhance and reinforce their learning in Science. They make use of videos, calculators and a range of interactive computer programs, as well the internet (if appropriate) to this end. In years 5 and 6, Science tasks are recorded digitally using eBooks.

Special Educational Needs and Inclusion

Children who are identified as having SEN (see SEN Policy) are entitled to access to the full range of the National Curriculum. The curriculum will be delivered in a broad, balanced way and will be differentiated according to their needs. Children should be provided with appropriately challenging work.

The teacher should set suitable learning challenges, respond to the children's diverse learning needs and help children to overcome potential barriers to learning. Teachers should provide opportunities for all children to achieve including boys and girls, children with S.E.N., children with physical disabilities, children from all social and cultural backgrounds, children from different ethnic groups and those from diverse linguistic backgrounds.

Health and Safety

It is the teacher's responsibility to ensure the safety of children during Science lessons and to make sure that the children are aware of any issues that may affect their safety. Risk assessments will be carried out where applicable.

The Role of the Leader

The Science Subject Leader's role is to:

- provide help and guidance, for all colleagues, in planning which will provide continuity and progression
- to support colleagues in assessment and record keeping
- monitor the children's learning in Science and feedback relevant stakeholders
- attend training sessions as appropriate and provide feedback during in-service training via Team Meetings and/or Staff Meetings or arrange for other Professionals (e.g. Science Advisors) to provide INSET sessions
- monitor resources and ensure there is a wide variety of materials and equipment for all ability groups
- to feedback relevant information concerning developments in Science and Science teaching to staff, Headteacher and Governors as necessary

