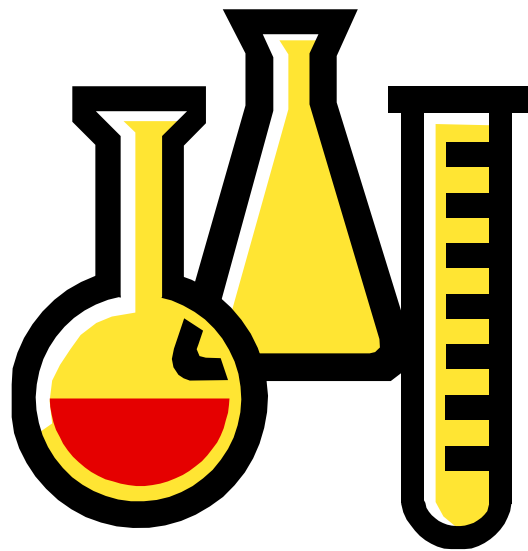


WINTON PRIMARY SCHOOL



SCIENCE POLICY

Science Policy

Aims

At Winton Primary School we aim to provide a rich Science curriculum which lays the foundations for the future. We aim to foster positive attitudes and confidence, enabling each child to experience success.

We believe that all children should be given opportunities for:

- structured play
- 'hands on' experience
- abstract thinking

in order that they develop as scientists.

Science Planning Programme

The school recognises its statutory obligation to teach National Curriculum P.O.S. but this is a framework upon which the Schemes of Work will be based to provide a broad Scientific curriculum. The school draws upon the L.E.A. for support and guidance.

Children will engage in Science activity for a minimum of 1.5 hours in Key Stage 1 and 2 hours in Key Stage 2. The Scheme of Work is based on topics which are regularly revisited and developed throughout the school.

Scheme of Work

Together the long term, medium term and short term planning form the Scheme of Work for Science.

Long Term Planning

In Key Stage 1, the National Curriculum P.O.S. is covered in each year with the exception of the work on electricity. In Key Stage 2, there is a two year cycle.

Medium Term Planning

The learning objectives are identified within the allocated P.O.S. and include both the acquisition of knowledge and skills. It is at this stage that resource needs are identified and cross curricular links are established.

The need to differentiate is taken into account at this stage of planning as well as coverage of the key Science skills.

Short Term Planning

Activities are planned in order to meet the learning outcomes of the children. Resources are identified, cross curricular links are recorded and key assessment questions for each learning objective are given.

The teachers plan opportunities for the children to acquire the skills of:

- observing

- sorting
- surveying
- research
- exploring
- investigating

ensuring balanced coverage throughout each year group.

Children will have opportunities to us:

- I.T.
- appropriate equipment
- a range of reference material

Management

Throughout the school, we use a variety of teaching and learning styles in order to inform and involve the children in making appropriate choices in order for them to be successful.

These are:

- individual
- whole class
- mixed ability
- ability groupings
- collaborative
- co-operative

A Science session has a recognisable structure in which children are briefed on the task, given time to develop their learning and finally to share their experience with their peers. It is vital that children are aware of their learning objective.

Children Recording Their Work

Children will be encouraged to record and present their learning in order to:

- help clarify their own thinking
- act as a note for future reference
- communicate ideas
- provide evidence of learning

Children will record their Science in the following ways:

- verbal
- pictorial
- constructed [a model with labels]
- diagrammatic
- written
- prompt sheet

In recording their Science, they could record results in the following ways:

- venn diagram
- pictogram

- histograms
- tables
- charts
- graphs
- sequential drawings

The verbalising and recording of scientific activity is important and is encouraged.

Teacher Record Keeping

The purpose of recording is to help planning and enhance children's learning. It is the responsibility of the class teacher to record progress made by pupils in his/her class.

A record of progression of Science throughout the school will be kept by the Science Curriculum Teacher.

Assessment

On going teacher assessment provides a formative picture of the child's progress and forms the basis of future planning. The key assessment questions for each learning objective enables the class teacher to assess whether the concept/knowledge/skill has been learned. Class teachers record bi-annually giving a summary of attainment in the form of a National Curriculum level description. SAT's are undertaken at the end of the Key Stage in accordance with national requirements.

Monitoring and Evaluation

The Science Curriculum Team meets regularly [once each term] to discuss Science issues in the school, e.g. resources.

The Curriculum Team Leader has responsibility for reporting back on Science developments to the Head Teacher an Governing Body.

Staffing and Resources

Each class teacher is responsible for the Science taught in his/her class. It is desirable that the class teacher ensures that support staff and parents are adequately briefed on the occasions when children are working with them.

The school is resourced with Ginn Star Science scheme books which are designed to support the non-specialist teacher in the teaching of Science.

Special Needs

The school recognises that children learn at different speeds. It is important to find ways of enabling them to succeed, thus avoiding the reinforcement of failure.

Equally, children with specific scientific abilities are challenged and extended [in order to meet this requirement, teachers will need further guidance].

Equal Opportunities

We are aware of the contribution Science education can make in fostering positive attitudes relating to Equal Opportunities and will be part of the monitoring process.

Health and Safety Issues

All staff are aware of the need to make a risk assessment prior to a practical Science lesson as part of their planning. The safety of the children must be paramount and class teachers should seek advice from the Science Curriculum Team Leader if in any doubt about the safety of an activity.

Keeping and Using Animals and Plants

The school recognises contact with animals and plants is highly desirable in the teaching of Science. Adults and children must give the welfare of the animal or plant high priority. There will be occasions when animals and plants are best studied in a classroom but it is desirable that they should be observed in their natural environment whenever possible. Animals, living or dead, will only be used for observation purposes and will not be interfered with in any way. Where there is a clear learning objective that requires removal of a part of a plant, it will be done in such a way so as not to harm permanently the plant and only common species from the locality will be used.