


<b>Document owner</b>	Etwall Primary School	<b>Approved by:</b>	
<b>Author:</b>	LC	<b>Minute number</b>	
<b>Version:</b>	V3 Oct 2018	<b>Next Review</b>	Oct 2021
<b>Signed by Chair of Governors</b>		<b>Signed by Headteacher</b>	

## Etwall Primary School

### Science Policy

#### **AIMS**

The aims of science are to enable the children to:

- ❖ develop their curiosity about what they observe, experience and explore and promote a desire to ask and answer scientific questions
- ❖ plan and carry out scientific investigations
- ❖ be able to select and use appropriate equipment safely and correctly
- ❖ develop scientific skills that will prepare them the future
- ❖ know and understand the life processes of living things
- ❖ know and understand the physical processes of materials, electricity, light, sound and natural forces
- ❖ know about the nature of the solar system including the earth
- ❖ evaluate evidence and present their conclusions accurately and clearly.

#### **LEARNING AND TEACHING**

##### **NATIONAL CURRICULUM**

The school uses the National Curriculum objectives for their science planning. Building in wow factors to their planning to engage the children with the objective/s being taught and to suit the needs of the children at Etwall Primary School. Each half term a minimum of one full investigation lesson is to be planned to ensure children develop their investigative skills as well as developing their science knowledge.

##### **FOUNDATION STAGE**

Planning for science in Foundation Stage is based on the Early Learning Goals. It is an integral part of the topic work covered throughout the year. For further information see the Early Years policy, specifically with reference to Understanding of the World.

##### **CROSS CURRICULAR LINKS**

Science contributes to many subjects within the primary curriculum and every opportunity will be sought to draw scientific experience out of a wide range of activities. This will allow children to begin to use and apply scientific skills and knowledge in real contexts. Every half term, opportunities will be planned for cross curricular writing within a science lesson.

##### **CURRICULUM ENRICHMENT**

Etwall Primary School endeavours to use a variety of methods to enhance the learning of Science away from the classroom. These include:

- ❖ clubs such as the Imagineering club
- ❖ parents and babies coming in to talk to the younger children in school
- ❖ enrichment visits to the National Space Centre in Leicester, Happy Hens, Rosliston Forestry Centre for tree planting as well as the National Sea Life Centre in Birmingham
- ❖ the use of the school nurse
- ❖ use of visitors such as Dr Mark / Mad Science on science based theme days / weeks

## **RESOURCES**

All science resources are kept in the drawers along the KS2 corridor, clearly labelled for ease of use by staff. Resources which are too big to be placed in drawers are in the cupboard along the KS2 corridor. Any broken resources or resources needed replacing such as batteries, should be reported to the science leader

School also has access, on request, to a further range of resources from the local secondary school.

## **INFORMATION COMMUNICATIONS TECHNOLOGY**

Technology is used in a variety of ways to support teaching and learning. Each teacher has access to an Interactive Whiteboard (IWB), as well as the school laptop trolley and the ipad trolley.

School has digital microscopes, data loggers and a visualiser which can be used as a webcam which can be used on the laptops or in the classrooms, again with the IWB. School digital cameras and the digiblue cameras are additionally available for children to use. Teachers make regular use of BBC class clips and other available online resources to further develop children's understanding of science.

## **EQUAL OPPORTUNITIES:**

At Etwall Primary School we are committed to providing all children with an equal entitlement to scientific activities and opportunities regardless of race, gender, culture or class.

## **INCLUSION:**

We aim to meet the needs of all our children by differentiation within science planning and in providing a variety of approaches and tasks appropriate to ability levels. This will enable children with learning and/or physical difficulties to take an active part in scientific learning, practical activities and investigations and to achieve the goals they have been set. Some children will require closer supervision and more adult support to allow them to progress whilst more able children will be extended through differentiated activities. By being given enhancing and enriching activities, more able children will be able to progress to a higher level of knowledge and understanding appropriate to their abilities.

## **MORE ABLE**

All children deserve an equal opportunity to receive the best education it is possible to give them. For those with special abilities and interests, provisions need to be made so they can achieve their potential. In addition, the more able children identified by the class teachers are stretched with the work that they are given so that they can achieve their full potential. More able Year 6 children in science are identified for our local secondary school.

## **ASSESSMENT**

Assessment is ongoing and continuous and is used to inform teachers' planning. Formal, summative assessment takes place at the end of Years 5 and 6 and a formal judgement is made at the end of Year 2. Each term teachers complete science skills and knowledge grids which will show where the class are and the progression they make over the year. There are separate knowledge grids for each year group and separate skills grids for each key stage – KS1, Lower KS2 and Upper KS2.

## **MONITOR AND REVIEW**

It is the responsibility of the science leader to monitor the standards of children's work and the quality of teaching in science. The science leader is also responsible for supporting colleagues in the teaching of science, for being informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school. The

science leader gives the headteacher an annual summary report in which s/he evaluates strengths and weaknesses of the subject and indicates areas for further improvement. The science leader also identifies areas of development and works on these where they are identified within the School Improvement Plan and the subject leader action plan.

#### **HEALTH AND SAFETY:**

Where appropriate reminders are given to children about potential hazards and care of the equipment they are using.

Any enrichment visits are planned with due regard to the school policy and Local Authority visit guidelines when taking children on outings. Risk assessments are carried out as appropriate on trips involving farms etc.