

**Bullion Lane**  
**Primary School**



**Science Policy**

## **Intent**

We aim to provide a broad, scientific curriculum that develops scientific vocabulary and empowers children to ask scientific questions – this will enable children to make careful observations and decisions based on justifiable reasons. We ensure various, memorable experiences (including experiments) take place to broaden the children's knowledge – all learning is accessible for all children regardless of their ability or background. Regular scientific teaching will sometimes be linked to a topic. Children are encouraged to read in science lessons through online and paper research, by visiting our school library, using Education City and books for children to make links across many areas of the curriculum. Maths links are made through science by improving data handling skills as well as being able to develop the recording of scientific experiments. Ultimately, we want children to enjoy learning all areas of 3 science and many topics will be covered on more than one occasion throughout their schooling in order to embed their knowledge. In teaching science there are a number of key skills and attributes that we will develop. The children are taught to work scientifically, which involves:

- Developing an understanding of science through enquiry and investigation;
- Observing, measuring and undertaking a variety of tests;
- Developing curiosity and asking scientific questions;
- Reading and using scientific vocabulary;
- Testing and developing ideas;
- Making decisions;
- Analysing functions, and relationships and interactions;
- Answering science questions using different types of scientific enquiry; and,
- An enjoyment and fascination of science.

## **Audience**

This policy is intended for all teaching staff and staff with classroom responsibilities, the School Governors, parents, inspection teams and Durham LA.

This policy document, after presentation to, and agreement by, the staff and Governing Body, is available to all teaching and non-teaching staff and the School Governors.

## **Philosophy**

This document is a statement of aims, principles and strategies for the teaching and learning of science at Bullion Lane Primary School. The learning and teaching of science at Bullion Lane Primary School aims to promote science as a core subject which is taught on a weekly basis across the foundation stage and key stages 1 and 2. It is seen as a practical subject that needs to be taught in a practical way (where appropriate) to stimulate curiosity, discussion and investigation. The teaching and learning of science should be linked to real world experience to encourage children to develop an understanding and enquiring mind. Our vision is to inspire enquiring minds for the future.

## **Implementation - Teaching**

The delivery of science teaching at Bullion Lane places an emphasis on scientific investigations and practical activities which are based on real world scenarios. Many of the units of work are taken and adopted from Twinkl Plan It. Each Unit of work has six lessons with lesson plans, success criteria, PowerPoints and differentiated worksheets. Science is taught in weekly lessons and is also delivered through cross curricular links in other subjects. Approximately 60 minutes are allocated to the explicit teaching of science per week. Science lessons are differentiated according to children's learning requirements. This ensures all groups of learners can access the curriculum and make progress in each session. Care is taken to ensure progression from the foundation

stage and throughout key stages 1 and 2. When topics are revisited another layer of knowledge and skills are added. All units of science from the are mapped out in the schools long and medium term planning and refined in short term planning. This ensures statutory content and skills are covered. We also use Education City to underpin any knowledge or gaps in learning by allowing children to revisit games and lessons from previous years. The pupils have access to a broad and balanced science curriculum.

### **Mixed-age Classes**

Where there are mixed-age classes, work in Science is organised in cycles over a two- year period. Close monitoring of learning objectives and differentiation strategies of the individual units within plans is required to ensure that individuals and groups within the class can make the progress appropriate to their age, maturation and previous experience.

### **Impact - Assessment, Recording and Reporting**

Pupil work is assessed by direct observation when completing science activities and in discussion with the teacher, as well as on the finished work. Children's achievements are shared with parents at Parent Consultations twice per year. Parents have access to children's work and individual dialogue with the class teacher. Parents see science displays and evidence of the children's work through class led assemblies, school presentations and work in their science books. A yearly assessment is completed to record the children's attainment and progress throughout KS1 and KS2 and uploaded to Durham Learning Gateway.

### **Resources and Accommodation**

We keep a wide range of science resources in a central store area in the school corridors and further resources deemed inappropriate to be placed around school in the staffroom. The subject leader is responsible for purchasing, organising and replenishing resources. The subject leader has an inventory of all resources available to teaching staff.

### **INSET Provision**

Will be provided when highlighted within the school improvement plan.

### **Equal Opportunities**

All teaching and non-teaching staff at Bullion Lane are responsible for ensuring that all pupils, irrespective of gender, ability, ethnic origin and social circumstances have access to the whole curriculum and the opportunity to make the greatest progress possible in all areas of the curriculum while at our school.

### **Health and Safety**

Safe working practices are an integral part of all Science activities. All staff are aware of safe and correct handling of tools, materials and equipment. The teaching staff demonstrate to pupils how to work safely and ensures that all children using equipment are properly supervised.

### **Equal Opportunities**

Consideration is always given in respect of cultural differences and experiences and to children whom English is an additional language. All children with Special Educational Needs are provided with challenging experiences in a flexible manner suited to their individual requirements

### **Monitoring**

Subject leaders monitor the delivery of science teaching and the quality of learning across the school. This is done through observations and drop in sessions. The subject leader also scrutinises children's books, the learning environment and medium, weekly and daily planning sometimes alongside the science curriculum champion.

### **Impact**

Evaluation is carried out to improve the teaching and learning of Science within Bullion Lane. All staff, teaching and non-teaching, appraise the curriculum provision made for Science within the school, in order that pupils make the greatest possible progress.

This policy will be reviewed every 2 years.  
Next review date: February 2024