



**BRAMLEY VALE PRIMARY  
SCHOOL**

**13<sup>th</sup> May 2019  
F81-18/19**

**SCIENCE POLICY**

## **Bramley Vale Maths Policy**

### **Together Everyone Achieves More**

#### **Vision Statement**

‘To create an excellent and challenging learning environment for the future through the promotion of creativity, high aspirations and perseverance’

‘To create a supportive, caring atmosphere of mutual respect, extending to the wider community’

#### **Aims**

<b>Safe</b>	to provide a safe, secure environment with equality for all.
<b>Healthy</b>	to promote healthy hearts and healthy minds.
<b>Achieve</b>	to provide an enjoyable education where children achieve and meet their full potential.
<b>Responsibility</b>	to instil responsibility for themselves, others and the wider world.
<b>Enterprising</b>	to develop learners who understand their future wellbeing and aspire to be the best they can be.
<b>Diversity</b>	To develop learners who accept, embrace & celebrate diversity in our ever-changing world.

**Purpose:** A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world’s future prosperity. All pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

#### **Aims:**

In science, our overall aims for our children are:

- To develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- To develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- To equip children with the scientific knowledge required to understand the uses and implications of science, today and for the future.
- To provide a structured and differentiated curriculum, which ensures continuity and progression throughout the Key Stages.
- To give children opportunities to learn by first hand experience and practical activity.
- To teach scientific skills attitudes and knowledge, build on children's natural curiosity and stimulate children to investigate and question.
- To ensure that children are aware of any potential hazards in any work they do and are taught to use tools and materials responsibly and safely.
- To relate science to the outside world and prepare children for life in a highly technical and rapidly changing world.
- To develop an awareness of how science is relevant to personal health.
- To include science in cross-curricular topic planning, to enhance other areas of the curriculum.
- To encourage children to explore scientific processes which will involve the skills of observation, questioning, finding a pattern, sorting, classifying, comparing, investigating, playing, exploring, making a hypothesis and testing it, interpreting results, drawing conclusions, recording, communicating through talking, drawing, writing, painting, making graphs, carrying out surveys, producing charts and tables.

- To use I.C.T. to collect, store, retrieve and present scientific information and to enhance learning in the subject.
- To ensure that staff training opportunities will continue to support the development of understanding, competency and expertise in scientific education.
- At the Foundation Stage children to gain knowledge and understanding of the world through the Early Learning Goals for exploration and investigation.

### **Planning and Provision:**

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of the National Curriculum, and science in the foundation stage (through Understanding the World). At Foundation Stage and in Key Stage 1 and 2, Science is linked to the Learning Challenge projects wherever possible.

At Key Stage 1, the minimum requirement of 1 hour per week is fulfilled and at Key stage 2, the minimum requirement of 2 hours per week is fulfilled.

### **Scientific enquiry:**

Working scientifically should be taught throughout the curriculum so that pupils learn to use a variety of approaches to answer relevant scientific questions. These types of scientific enquiry should include observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils should seek answers to questions through collecting, analysing and presenting data.

When carrying out a scientific enquiry, teachers in KS1/2 use whole class planning sheets so that there is a consistent approach to the way in which enquiries are carried out. As pupils progress through school, they should become more independent in their ability to carry out a scientific enquiry and begin to use the planning sheets within small groups, pairs and eventually individually.

### **Assessment:**

Teachers assess through a variety of methods, which include observation, discussion, self and peer assessment, marking and testing. Once assessment are made, statements are highlighted on Target Tracker. Once a term, a summative assessment is made of the step that each pupil is working at.

### **Health and Safety:**

Whilst Primary Science does not require pupils to handle dangerous chemicals, some science lessons involve experiments and demonstrations that are potentially hazardous if mishandled. Teachers will always warn pupils of any potential dangers and ensure that appropriate precautions are taken. Teachers will follow guidance given in the National Curriculum. Pupils are expected to develop the ability to take responsibility for the safety of themselves and fellow pupils. All practical activities will be fully supervised and it may on occasions be necessary to have other adult helpers. In the case of any accidents, pupils will be referred to the first aider. A balanced approach to risks of experiments will be taken. In cases of uncertainty, the Headteacher will be referred to for guidance.

### **Monitoring and review:**

The science coordinator (Andy Stoppard) and the leadership team will monitor the planning, teaching, learning, and assessment of science, under direction from the Head Teacher. The policy will be reviewed in accordance with our policy review cycle.