

## **Badgerbrook Primary School Science Policy**

### **Badgerbrook Science Vision:**

Our children will have an excitement and curiosity about the scientific world around them and will strive to understand it.

They will understand that Science is all around us, is relevant to them and is an important part of our daily lives.

We want this love of Science to stay with them into adult life, influencing career choices in the future.

Through relevant, practical Science experiences and enquiries, pupils will be able to confidently ask questions, predict how things will behave, explain what is occurring and analyse causes. Their explanations will be full of accurate scientific vocabulary as they communicate and explain their ideas in a variety of ways.

They will be able to link and apply their understanding of Science across the curriculum, developing transferable skills such as observation, researching, measuring, recording, communicating and teamwork.

### **Badgerbrook Science Aims:**

Our Science policy follows The National Curriculum 2014 for science guidelines and aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. This will develop their Science Capital.
- 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
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

### **PLANNING**

The Science Programmes of Study are set out year-by-year for Key Stages 1 and 2. In the Foundation Stage, teachers work from the Early Years Outcomes.

Teachers base their planning on the Programmes of Study / Early Years Outcomes for their relevant year groups and ensure the coverage is within and beyond national expectations, so that children make progress in line with national expectation and above throughout the academic year.

### **Scientific knowledge and conceptual understanding**

The programmes of study describe a sequence of knowledge and concepts. While it is important that pupils progress through this sequence, it is also vitally important that they develop secure understanding of each key block of knowledge and concepts in order to progress to the next stage.

Pupils should be able to describe processes and key characteristics of science and use technical terminology accurately and precisely. They should build up an extended specialist vocabulary (sticky words) for each unit of work. They should apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data. All of this will lead to the development of their Science Capital.

## **The nature, processes and methods of science**

The 'Working scientifically' sections in the Science Programme of Study specify the understanding of the nature, processes and methods of science needed for each year group. Additional guidance is provided in the Progression matrices from the Association of Science in Education (ASE). 'Working scientifically' should be linked to current work wherever possible and not taught as a separate strand.

## **Teacher knowledge and understanding / CPD**

The subject leader will support members of staff with subject knowledge and delivery of the Science curriculum throughout any point in the academic year.

CPD will be offered through:

- sharing outstanding practice in Science;
- working closely with staff during different stages of planning;
- providing opportunities for the staff to attend external Science training opportunities

## **Attainment**

By the end of each key stage, pupils are expected to know, apply and understand the learning, skills and processes specified in the relevant Programme of Study / Early Learning Outcomes. The school submits teacher assessments of attainment by the end of Foundation Stage, Key Stage 1 and 2.

## **ASSESSMENT**

**This is achieved through:**

- discussions with pupils;
- observations of pupils;
- marking work; leading to teacher assessment of attainment for each unit of work.

These activities will lead to overall teacher assessments which will be shared with parents and external agencies (who have a statutory requirement to collect teacher assessment data of attainment in Science). They will also be used by the Science Leader to allow year group assessment tracking.

## **MONITORING AND EVALUATION**

The Science Subject Leader will

- monitor and evaluate pupils' work – in books, photos and displays
- hold discussions with pupils about their learning
- conduct learning walks including brief lesson observations;
- monitor end of key stage assessments

## **SAFETY**

The schools' health and safety policy will be followed.

Following Health and Safety guidelines as outlined in the ASE publication "Be Safe" Fourth Edition Reprinted 2012 (this is the current guidance)

## **PARENTAL INVOLVEMENT**

Parents may be invited to participate in class-based work or to offer a particular skill which complement the current studies of the class.

All parental involvement must take place following the school's safeguarding procedures.

## **REPORTING TO PARENTS**

Following the whole school policy based on national requirements and guidelines.

**MARKING WORK** Refer to the whole school policy.

## **REVIEW**

This policy was reviewed and adopted in March 2020. It will be reviewed at least 3 yearly in line with the school's policy review schedule.

**Science Subject Leader: Mrs D Newcombe**

Signed:



Date: March 2020

Headteacher