



# Science Policy

2020

Reviewed by D. Robinson

## **Science policy**

### **Roseberry Primary School 2020**

This policy outlines the teaching, organisation and management of science taught and learnt at Roseberry Primary and Nursery School. The policy has been drawn up as a result of staff discussion and has the full agreement of the Governing Body. The implementation of this policy is the responsibility of all teaching staff. The responsibility for monitoring and review rests with the science subject leader.

#### **Intent**

At Roseberry we believe that the best science teaching is inspiring, fun and practical and helps stimulate pupil's curiosity in the subject which will lead them to fulfil their potential.

We believe that pupils need to acquire the knowledge of biology, physics and chemistry and have the experience of engaging and purposeful scientific enquiry in order to answer scientific questions about the world around them.

Pupils are encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

#### **Implementation**

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science.

The main aspects of science to be studied will be determined by the programmes of study of the National Curriculum 2014 and 'Understanding the world' in Early Years Foundation Stage.

We aim to:

Develop pupil's interest and enjoyment in science and appreciation for its contribution to all aspects of everyday life.

Build on pupil's natural curiosity and developing a scientific approach to problems.

Prepare our children for life in an increasingly scientific and technological world.

To use a range of practical activities and investigations to give children a greater knowledge of the concepts of science.

Develop the use of the language and vocabulary of science, recording and techniques.

Develop the use of computing in investigating and recording (Safety net)

Make links between science and other subjects.

To promote a healthy lifestyle to our pupils (Live well and live long)

## **Teaching and learning**

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of the National Curriculum Science and science in the Foundation stage.

It is taught in blocked units through a combination of whole class teaching, group and individual work. All science lessons have focused learning objectives, clear differentiation and success criteria to ensure that pupils make at least good progress.

In the years where we have one form entry Science is taught on a one year programme. In the year groups where there are mixed classes it is taught on a two year rolling programme.

'Working scientifically' is embedded throughout the areas of learning in key stage 1 and 2; this focuses on the key aspects of scientific enquiry which enable pupils to investigate and answer scientific questions.

Areas of learning within key stage 1 and 2 ensure that statutory requirements are being covered through the specific disciplines of biology, chemistry and physics.

The staff at Roseberry Primary ensure that all children enjoy high quality teaching and learning experiences, which allow children to explore their outdoor environment and locality, thus developing their skills in scientific enquiry.

Visitors to school are closely linked to topic e.g. the school nurse for Year 2 'Animals including Humans'.

Please refer to the long-term plan for details of the specific areas of learning covered in each year group over the year.

## **EYFS**

During the Foundation Stage children begin to explore the world around them, with specific Science work covered through the Early Learning Goal 'Knowledge and Understanding of the World'.

## **Impact**

The impact and measure of this is to ensure children not only acquire the appropriate age related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points.

Our engagement with the local environment ensures that children learn through first hand experiences of the world around them.

All children will have:

- A wide variety of skills linked to both scientific knowledge and understanding, and scientific enquiry skills.
- A richer scientific vocabulary which will enable them to articulate their understanding of concepts that they have been taught.
- High aspirations, which will help them progress to further study, work and a successful adult life.

## **Assessment and recording in science**

We use assessment to inform and develop our teaching.

Units commonly begin with an assessment of what children already know.

Children are involved in the process of self-improvement, recognising their achievements and acknowledging where they could improve.

We have a tracking system to follow and accelerate children's progress. The school science coordinator monitors progress through the school.

Children who are not succeeding, and children who demonstrate high ability in science, are identified and supported. The school uses end-of-unit tests to assess learning and point up areas where work is needed.

Equally important is the continuous assessment of children's work, much of which is informal. This assessment is used to inform teaching throughout the school.

The Y2 and Y6 staff assess children's level of attainment at the end of the KS1 and KS2 programmes of study. This teacher assessment is based on assessment records and work samples.

Reports are made to parents once a year on the children's progress in Science.

## **Resources**

Resources are stored in the school's science cupboard where they are organised into topic boxes.

## **Monitoring and review**

### **Role of the subject leader**

The Science Leader has a keen interest in Science, regularly reading and updating subject knowledge. Local cluster meetings are attended, which include moderation.

A collaboration has begun with the Ogden Trust partnerships in order to promote CPD for teachers as well as providing learning opportunities for pupils.

### **It is the responsibility of the science leader to:**

To develop, implement and review an action plan for science.

To work collaboratively with staff to provide effective learning opportunities for all pupils.

To monitor science throughout the school.

To renew and update science resources needed to deliver the curriculum within budget restraints.

To develop activities for children at different stages of development which enables children to progress in the subject.

The policy will be reviewed at least every two years.