# Catmose Primary

# SCIENCE CURRICULUM POLICY

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#### INTRODUCTION

Science is a core subject area for the EYFS (Understanding the World), Key Stage 1 and Key Stage 2. This policy was developed by the SLT in conjunction with the whole teaching staff. This followed a School Review into the teaching and learning within Science. The Scheme of Work for Science, following the National Curriculum should be referred to.

### **INTENT**

Science is a body of knowledge built up through experimental testing of ideas. Science is also methodology, a practical way of finding reliable answers to questions we may ask about the world around us. Science in our school is about making link's, developing children's ideas and ways of working that enable them to make sense of the world in which they live through investigation, as well as using and applying process skills. We believe that a broad and balanced Science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability. Our aims in teaching Science include the following.

- Preparing our children for life in an increasingly scientific and technological world.
- Fostering concern about, and active care for, our environment.
- Helping our children acquire a growing understanding of scientific ideas.
- Helping develop and extend our children's scientific concept of their world.
- Developing our children's understanding of the international and collaborative nature of science.
- Foster curiosity to ask questions about the world around them.
- Develop the skills and independence to work out the answers to scientific questions on their own based around the scientific method.

## **IMPLEMENTATION**

The units within science cover the broad headings of:

- Scientific Enquiry / "Working Scientifically",
- Life Processes and Living Things,
- Materials and their Properties,
- Physical Processes.

Hamilton Trust scheme of work is followed, supplemented by further resources, to support teachers in planning clear sequences of learning for Science. This provides full coverage of the National Curriculum for Science and Science in the Early Years Foundation Stage. Science teaching in the school is about excellence and enjoyment. We adapt and extend the curriculum to match the unique circumstances of our school through the support of a specialist Science teacher/lab technician. KS1 and Early Years Foundation Stage pupils are taught science for a minimum of one hour each week. KS2 pupils are taught science for a minimum of two hours per week. In KS1/ Foundation Stage, a minimum of one third of lessons overall includes practical scientific enquiry. In KS2, a minimum of 50% of lessons overall includes practical scientific enquiry. Throughout the primary, pupils are taught Science as whole class groups, in small groups, pairs and individually.

All staff in the Primary teach Science. Links to the Federation Schools (Catmose College and Harington School) are used to support Science teaching and learning. The Science laboratory in place at the Primary provides the resources and space for Science focused sessions.

Each year group follows 6 units of work per year (one per term) with the structure of:

- Content with the development of Knowledge Organisers,
- Practical Skills (introduced and practiced),
- Investigation.

#### **IMPACT**

The formal assessing and recording of pupils' achievements in Science is carried out by continual teacher assessment through observations and marking. These are then used to produce end of term evaluations and regular reports and targets. We use assessment to inform and develop our teaching:

- Topics commonly begin with an assessment of what children already know.
- At the end of the unit of work Concept Cartoons are used to assess how the children can use and apply their knowledge and understanding from that unit of work.
- We assess for learning (AfL). Children are involved in the process of self-improvement, recognising their achievements and acknowledging where they could improve. Activities during, and at the end of each topic record achievement and celebrate success.
- We mark each piece of work positively, making it clear, either verbally or on paper, where the work is good and how it could be further improved.
- We have a tracking system to follow and accelerate children's progress. The School SLT monitors progress through the school by sampling children's work at regular intervals in Pupil Progress Meetings. Children who are not succeeding and children

who demonstrate high ability in Science, are identified and supported or challenged. Reports are sent to parents, which include Science, 3 times a year.

We use a range of measures to determine the success of our curriculum which are monitored and shared with governors, these include:

- Pupil attendance. If our curriculum is engaging, broad and balanced, pupils will want to attend School.
- Pupil behaviour. If the curriculum is right for our children, lessons and other
  activities will be engaging and rates of poor behaviour and exclusions will be
  low.
- The quality of lessons observed. If our curriculum is well designed and planned, lessons will be of a high quality and this will be shown through the grades the senior team award for lessons.
- Pupil engagement in the enhanced curriculum. We will monitor pupil participation in trips and visits, events within School, competitions and clubs, ensuring that all pupils are involved in a broad mix of activity.
- A strong positive response for our stakeholder surveys. We annually survey staff, pupils and parents asking a range of questions about our curriculum.
- Outcomes at the end of the EYFS, Phonic Screening Check, KS1 SATs and KS2 SATs, with progress made from KS1 SATs to KS2 SATs. If the curriculum we offer meets the needs of our children, outcomes will be good or better.