

# St Thomas's CE Primary School Science Policy

### AIMS & OBJECTIVES

Our Science Policy follows The National Curriculum and aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding;
- 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 in the future.

### PURPOSE OF STUDY

A high-quality Science education provides foundations for understanding the world. Science has changed our lives and is vital to the world's future prosperity. Through building 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 key knowledge and concepts can be used to explain what is occurring, predict how things will behave, and analyse causes.

# In teaching Science, we are developing in our children:

- a positive attitude towards Science and an awareness of its fascination;
- an understanding of Science through a process of enquiry and investigation;
- confidence and competence in scientific knowledge, concepts and skills;
- an ability to reason, predict, think logically and to work systematically and accurately;
- an ability to communicate scientifically;
- the initiative to work both independently and in co-operation with others;
- the ability and understanding to use and apply science across the curriculum and real life.

### PLANNING THE SCHOOL CURRICULUM

The programmes of study for Science are set out year by year for Key Stages 1 and 2. We are however, only required to teach the relevant programme of study by the end of the Key Stage. By the end of each Key Stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

# **Early Years Foundation Stage (EYFS)**

We teach Science in the EYFS as an integral part of the 'Understanding the World, 'Communication and Language' and 'Personal, Social and Emotional Development' areas of learning within the Early Years Foundation Stage. These are set out in the EYFS/KS1 Progression Drive document.

### THE ROLE OF THE SUBJECT LEADER

- To promote good practice throughout the school and extend good practice among colleagues and classes
- To implement and contribute to new initiatives
- To investigate the whole school progress and performance in line with National Curriculum requirements

- To prepare the subject policy document
- To organise, plan and lead inset as needed
- To maintain an up-to-date stock of resources and equipment to ensure effective curriculum delivery
- To arrange and coordinate subject based events
- To celebrate their subject within school and the wider community
- To maintain a subject leader file and website subject page which includes a portfolio of evidence to support good practice

# **INCLUSION**

Teachers are required to set high expectations for every child ensuring work sufficiently stretches all children – including those children who are working above the expected standard. In addition, work is planned at the appropriate level for those children who are working below expectations or who come from disadvantaged backgrounds. Teachers are required to set ambitious targets which children are aware of and are able to talk about. Teachers ensure that all planning evidences that there are no barriers to progress and attainment. The teaching opportunities for children for whom English is an additional language help develop their grasp of English and aim for children to access all subjects. Children are encouraged to debate various issues, as well as being encouraged to develop high level questioning skills in order to steer their own learning.

# **EQUALITY DUTY**

Under the Equality Act 2010, we have a duty not to discriminate against people on the basis of their age, disability, gender, gender identity, pregnancy or maternity, race, religion or belief and sexual orientation. This policy has been equality impact assessed and we believe that it is In line with the Equality Act 2010, as it is fair, it does not prioritise or disadvantage any pupil, and it helps to promote equality at this school.

### HEALTH & SAFETY

Pupils will be taught to use scientific equipment safely when using it during practical activities. Class Teachers, Teaching Assistants and the Subject Leader will check equipment regularly and report any damage, taking defective equipment out of action. Teachers will ensure the School Policy for Health and Safety is integrated into Science teaching.

# ASSESSMENT AND FEEDBACK

After each unit of work, Teachers will note any children who have not met/exceeded against the NC statements for each topic within their year group. Throughout the year, teachers will plan for on-going assessment opportunities in order to judge whether the children have achieved the Key Learning and Working Scientifically expectations for their year group.

In Science we will also assess by:

- Talking to the pupils and asking questions.

- Discussing the work with the pupil.
- Looking at the work and marking against the learning objective.
  - Observing the pupils carrying out practical tasks.
    - Pupils self-evaluation of their work.

Science work is marked in line with the school marking policy and feedback on improvements, written or verbal, is given. Monitoring by SLT and subject leader ensures standards are high. Parents are informed about progress in Science verbally at parents evening and in the end of year written report.

### MONITORING AND EVALUATION

The Science Subject Leader will monitor and evaluate the teaching and learning of Science through:

- monitoring and evaluation of pupils' work
  - lesson observations
  - monitoring of planning
    - pupil interviews

# RESOURCES

Science resources are stored in the KS2 department outside the Year 6 classroom and also in individual classrooms. The subject leader must be informed of any changes regarding science resources i.e. missing or broken resources and/or when new or replacement resources are required.

Science Co-ordinator: E Yates