Woodmansey CE Primary School

Science Policy

1. INTRODUCTION

This policy is a working document, which reflects the ethos and practice within the school in relation to Science. It has been written with due regard to the requirements of the the National Curriculum and is aware of current good practice linking Science to other subjects being taught in a more cross- curricular framework.

2. FUNDAMENTAL PRINCIPLES

The whole ethos of Woodmansey CE Primary School is to provide every child with a happy, nurturing and positive learning environment in which he or she can develop their full potential – whatever their needs and irrespective of ability, race or gender.

Woodmansey CE Primary school believes that: Science stimulates and excites pupils' curiosity about phenomena and events in the world around them. It also satisfies their curiosity with knowledge. Because science links direct practical experience with ideas, it can engage learners at many levels. Through the subject, pupils learn to raise questions and discuss science-based issues which may affect their own lives and the world in which they live.

AIMS

- To develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- To develop the natural curiosity of children about the world around them.
- To develop questioning and enquiring minds through a range of enjoyable and interesting experiences.
- To help children develop the skills to make systemic enquiries.
- To provide opportunities for children to apply theoretical ideas to the solving of practical problems.
- To enable children to develop an increasing attention to accuracy.
- To foster a positive attitude to science and increase their understanding of how science is used in the wider world and in the future.
- To develop the understanding of the nature, processes and methods of science through different types of scientific studies.
- To develop accurate use and spelling of scientific vocabulary.
- To meet the needs of each child so that they will reach their full potential.
- To provide opportunities to explore science learning which is linked to a broader theme involving other subjects, such as STEM.
- To engage children's enthusiasm for science in an annual science week, which is rich in practical activities.
- To teach science in a global and historical context; including the contributions of significant scientists.

3. ROLES AND RESPONSIBILITIES

The governing body should, in co-operation with the Head of School, determine the school's general policy and approach to Science at Woodmansey CE Primary School.

The Science Co-ordinator should advise the Head of School, staff and governors of current practice in Science and any new initiatives put forward by the governments or LEA.

4. PLANNING

The Long Term plan for Science is based on the Science Programmes of Study for Key Stage 1 and 2 from the 2014 National Curriculum. Each year group has allocated units to study totalling 64 hours. These link into the school's 'Thematic Spiral'.

Medium Term plans have been written based on these Programmes of Study. From these, class teachers write their Short Term Plans in accordance with the school's policy on Accelerated Learning.

5. APPROACHES TO LEARNING

The school is committed to the importance of learning through first hand experiences in Science and developing children's understanding of science through Accelerated Learning techniques.

Where ever possible, it is important that the children learn through the 'Working Scientifically' strand of Science and develop skills as 'real scientists'.

Through individual, small group and whole class experiences, pupils will be given the opportunities to develop the intellectual and practical skills to allow them to explore the world of science.

The activities will require a progressively more systemic approach, drawing on knowledge gained through previous experiences. They will be relevant to the children and will provide opportunities for trying out their own ideas. Activities will be differentiated by the class teacher when required and appropriate to the pupils being taught.

The curriculum for science reflects the importance of Spoken language in pupil's development. The quality and variety of language that pupils hear and speak are key factors in developing their scientific vocabulary and articulating scientific concepts clearly and precisely.

6. PROVISION WITHIN THE EYFS

Science in the Early Years is taught through the areas of provision. Our aim is to develop enquiring minds and make science fun. There are opportunities to explore and investigate, both inside and out. The children regularly use the outdoor area and participate in local walks to support science learning.

The children are encouraged to use their fine and gross motor skills to develop scientific skills.

They learn through talk, songs, play and being surrounded by a stimulating environment rich in opportunities and scientific vocabulary.

Visits from scientists, science week and educational visits to local farms and garden centres all bring science alive and encourage a scientific mind.

7. ASSESSMENT

Assessment is an on-going process which enables teachers to match the level of work to the children's understanding. Informal judgements will be made during lessons and completed work will be marked in accordance with the target set and appropriate success criteria.

At the end of a unit of work, teachers will make a summary judgement on the attainment of each child based on the National Curriculum statutory requirements. Children's achievements will be recorded using Flic and this will then be used to inform future planning. The science co-ordinator will also be able to monitor the attainment of children in Science by accessing the Flic data across the school. As part of the Key Stage 1 and Key Stage 2 SATs, children will be teacher assessed in Science.

8. SAFETY

All experiments are carried out in accordance with national safety guidelines published in the ASE 'Be Safe' publication. Safety issues are recorded on the short term plans and teachers notify the Science Subject Leader if there are any amendments or concerns. In addition to this, advice is available from CLEAPSS.

9. CROSS-CURRICULAR OPPORTUNITIES

Whilst Science is taught as a discrete subject, where relevant it will be linked with all other areas of the curriculum e.g. Literacy, DT and Maths. The school also supports STEM in school wherever possible, with a focussed STEM week providing cross curricular opportunities every year.

10. RESOURCES

The school provides quality resources for each unit of work which are stored in a central location.

11. LEGISLATIVE FRAMEWORK FOR SCIENCE

Woodmansey CE Primary follows the National Curriculum programmes of study for science. The documentation can be found at:

https://www.gov.uk/government/publications/national-curriculum-in-england-science-programmes-of-study

12. EQUAL OPPORTUNITIES

Teachers will be aware of children who have an SEND Support Plan and those in vulnerable groups such as Pupil Premium; they will then be monitored appropriately. Work will be differentiated to the needs of the children to enable them to meet their full potential in the subject.

The teacher will also monitor those children who it is believed have an aptitude for the subject and a record will be kept to enable future teachers to develop these children's ability.

13. INSET

The Science Subject Leader will attend courses organised by the LEA. The Science Subject Leader will deliver INSET on changes to National and East Riding policy.