Science Policy

Name of school: **Huxley CE Primary School.**
Date of policy: **October 2021**
Member of staff responsible: **Mrs. J. Chilton**
Review date: **October 2022**

Curriculum Intent

All schools must provide a curriculum that is broadly based, balanced and meets the needs of all pupils. At Huxley CE Primary School our curriculum is designed around our Christian values and our approach is to deliver learning which excites and inspires, provides opportunity for recap and challenge, raises questions for debate, develops learners' confidence and enables independent learning to flourish. High standards, collaboration and valuing individuals' well-being is at the heart of this process. We believe that how we teach is as important as what we teach and that enrichment experiences are an entitlement. We want our curriculum to enable our children to be reflective, responsible and kind in line with our school core values.

Definition

Science is a way of working that allows children, through practical first hand experiences and secondary sources, to develop their knowledge and understanding of the world in which they live. These experiences should enable children to observe, question, investigate, make sense of and communicate and evaluate their findings.

Aims To encourage children to:

- develop a questioning and reflective mind by providing a range of exciting and enjoyable activities.
- develop a systematic and logical way of working.
- apply their skills and knowledge to investigative work.
- come to a deepening understanding of scientific concepts.
- work safely and carefully.

Intent

Science aims to give all children a strong understanding of the world around them. They are able to discover how the world works and our place, impact, roles and responsibilities within our environment. Our children are encouraged to ask questions and apply their scientific skills and knowledge to investigate and find answers. The children are able to develop a systematic and logical way of working and are able to reflect on investigations to develop knowledge and gain informative answers. Science allows children to be inquisitive in a safe environment. It will help develop confident, articulate and investigative learners.

Teaching and Learning.

All children have access to the Early Years Foundation Stage Curriculum and Science National Curriculum. At Huxley CE Primary School, we use a long term Science curriculum plan delivered over a two year period to ensure that all units are covered. Our plans show the breadth of study as well as how 'Working Scientifically' is embedded within each unit of work. Plans also include the key knowledge for each topic that all children should know. Scientific vocabulary is to be taught with each unit of work to enable children to articulate scientific concepts clearly and precisely. The

teaching of Science at Huxley CE Primary School may be as a whole class, in small groups or individual work.

Curriculum enrichment

We ensure that children have access to a wide range of educational experiences outside of school through trips organised by school. We also encourage children to share their home learning experiences via 'Showbie'.(An online communication window for pupils to upload and share their home learning with their class teacher.)

Working Scientifically

Working Scientifically must always be taught through and clearly related to the programme of study. Pupils at Huxley CE Primary School learn to use a variety of approaches to answer relevant scientific questions by collecting, analysing and presenting their findings. Children will use different types of enquiry throughout each year:

- Observe over time
- Classifying and grouping
- Pattern seeking
- Comparative and fair test
- Research and secondary sources Through this approach we aim to develop the following skills: observing, raising questions, predicting, hypothesising, planning, controlling factors (fair testing), measuring, collecting and interpreting data, constructing tables and graphs, explaining, communicating and evaluating findings, researching information.

Attitudes Through Science

We endeavour to foster the following qualities:-

- Excitement
- Curiosity
- Perseverance
- Open-mindedness
- Self-discipline
- Sensitivity to others
- Independence
- Adaptability
- Co-operation
- Care for living things.

Equal opportunities

All children at Huxley CE Primary School are given equal opportunities in all areas of Science. We monitor the attainment and engagement of all groups of children to ensure there are no patterns of attainment causing concern.

Progression

We recognise that our curriculum planning must allow for children to gain a progressively deeper level of knowledge, understanding and skill competency as they move throughout the school. Our Science plans are progressive and enable teachers to adjust plans to meet the particular needs of individuals or groups of children.

Information Communication Technology

We see ICT as an important tool in Science. Children research, communicate, collect and interrogate data in a variety of ways.

Records and Assessment

Assessment of children's development is made through a combination of end of unit assessments, ongoing teacher assessment, formal tasks where appropriate. A record is kept of children's achievements in Science including 'Working Scientifically' through teacher's own notes.

Progress and achievement in Science is reported to parents through end of year reports and during autumn and spring parent meetings.

Safety

It is important that children are taught the rules of safety when undertaking experiments and investigations. Materials and equipment need to be handled sensibly and we try to ensure that children do this. It is the teacher's responsibility to make sure that all helpers (TAs, parents etc.) are aware of safety implications connected with any Science activity they are undertaking.

Monitoring

The Science curriculum is monitored by the science co-ordinator through staff communication, observation of teaching, monitoring of medium term plans, children's work, pupil voice and analysis of data.

Resources

The science resources are kept mostly in the Science Cupboards located in Oaks Classroom for the use of both Key Stages. All equipment is clearly labelled in the cupboard.