

## Holt Farm Infants Science Policy 2018

We will provide opportunities for all children to build on earlier experiences, developing knowledge, skills and understanding and to prepare them for the future in the 21<sup>st</sup> Century.

*“Science has changed our lives and is vital to the worlds future prosperity, Pupils should be encouraged to develop a sense of excitement and curiosity about natural phenomena developing the power to give rational explanation; explain what is occurring, predict how things will behave and analyse causes”* DFE The National curriculum 2014

### Links with School Aims

The Policy pays full regard to the aims of the school

- ☆ To provide a happy, caring well-ordered environment, in which children feel safe, secure, valued and respected.
- ☆ To provide a stimulating environment that will enlarge the child’s knowledge, experience and imaginative understanding and motivate natural curiosity.
- ☆ To provide a well structured balanced curriculum that will help the child to acquire knowledge and skills relevant to adult life in a rapidly changing society.
- ☆ To encourage each child to be considerate, co-operative, courteous, tolerant and respectful.
- ☆ To promote confidence, self-discipline and a high self-esteem.

### Entitlement

All pupils are entitled to have access to the Science Curriculum regardless of race, creed or gender or any disability and must have regular access to science appropriate to their age and stage of development. Emphasis should be given to Science as a core curriculum subject.

### Aims of the Policy

- To ensure the fulfilment of statutory requirements –

*“Developing understanding of scientific knowledge and conceptual understanding through the disciplines of biology, chemistry and physics”* DFE The National Curriculum 2014.

- To support each child to develop her/his full potential in all areas of education, according to individual needs and abilities.
- To promote good relationships with the local and wider community, and to promote the active co-operation of teachers, non-teaching staff, governors, parents, advisors and inspectors in achieving the aims of the school.

- To develop knowledge and understanding of scientific ideas, processes and skills and relate these to everyday experiences.
- To develop cross curricular links for example using mathematical skills to collect, present and analyse data.
- To provide opportunities to learn about ways of thinking and of finding out about and communicating ideas.
- To explore values and attitudes through science.

## **Planning, Teaching and Learning**

Planning in Years 1 and 2 must show due regard to the programmes of study and breadth of study requirements for science from The National Curriculum 2014 and Foundation Stage Profile.

Teachers must

- Build on and foster pupils' natural curiosity by informing, explaining and stimulating ideas.
- Provide a structure that allows pupils to develop and consolidate their understanding through planning and carrying out investigations.
- Develop pupils' ability to ask questions and solve problems.
- Equip children with the scientific skills of observing, predicting, recording and drawing conclusions.
- Ensure teaching approaches in the classroom include a mixture of whole class, group and individual work to ensure best practice and quality for all children.
- Ensure teaching approaches in the classroom include a mixture of visual, auditory and kinaesthetic styles to ensure all styles of learning are included.
- Encourage co-operation and develop communication skills.
- Utilise and exploit cross curricula links where they exist.
- To consider general teaching requirements for inclusion, health and safety and differentiate as appropriate.
- To avoid undue reliance on pupils' recording ideas in written form, but explore a range of methods of recording ideas and findings.

## **Organisation of Resources**

- There is a central store of resources in the hall cupboard
- Resources are stored in boxes labelled with the unit from the QCA scheme of work.

- Each box has a list of resources linked to learning objectives from the QCA unit.

## Assessment and Monitoring

Assessment of pupils' achievement must be a balance of formative and summative assessment. Key learning objectives are identified on weekly planning and assessment made against the learning objectives. Assessments must be made against the unit taught each half term recording if a child is working towards, has met or exceeded.

Techniques included:

- Observation of pupils at work
- Questioning pupils
- Discussion
- Oral presentations
- Monitoring pupils written and pictorial work
- Work sheets
- Science tasks and tests
- Completed unit assessments are passed to the Science Co-ordinator at the end of each unit of work.

### The purpose of assessment is

- To aid future planning
- To report to parents, pupils and other teachers
- To motivate pupils
- To provide information to the subject co-ordinator about pupils' learning in each QCA unit.
- To provide information for SMT and Governing Body to aid target setting.

## Evaluation

We will judge the success of our science teaching by

- The motivation and interest displayed by pupils
- The development over time of pupils' understanding of concepts and processes
- The ability of pupils to apply their understanding to new situations
- Displays of children's work
- The quality of science work
- Assessment
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### Co-ordinators Responsibilities

- Monitoring the teaching and learning of science by scrutinising children's work, talking to children, observing teachers, monitoring planning, analyzing assessment data and giving feedback to colleagues, governors and the Headteacher.
- Managing the capitation budget and evaluating resources.
- Reviewing policy statements and schemes of work.

- Auditing staff needs and providing INSET as required.

This policy has been prepared by the Science Co-ordinator in consultation with teaching staff and governors.