FULWELL INFANT SCHOOL ACADEMY

SCIENCE POLICY AND GUIDELINES

RATIONALE

At Fulwell Infant School Academy science is set within a broad, integrated curriculum. We aim to ensure that every child has access to a range of science based experiences, which:

- Are developmentally appropriate;
- Make sense of their world through exploration and structured play;
- Cover all area of science learning;
- Aim towards common high standards for all

In our school the teaching and learning in science is firmly based in the children's direct experiences, which include their developing knowledge of their immediate environment including themselves, other people, and features of the familiar, natural and constructed world.

AIMS

- To enable children to approach learning in science with confidence and high self-esteem
- To motivate children to learn, encouraging them to be enthused by their science experiences
- To develop children's communication skills, in particular the use of correct and appropriate vocabulary for objects and processes
- To enable all children to become increasingly independent in their thinking skills
- To develop cooperative skills of DT
- To develop ICT capabilities
- To develop understanding of range of basic scientific concepts
- Generate own questions, predict and hypothesise
- To enable children to question and discuss science-based issues that may affect their own lives and the future of the world

- To provide challenging and interesting learning activities which support development of skills in science, knowledge and understanding of science and attitude towards science
- To develop pupils understanding of the need for Health and Safety and so develop safe practices

GUIDELINES

- Provide science learning opportunities and stimuli that encourage children to actively explore and experiment with a range of materials in order to promote their curiosity and enthusiasm
- Provide both an indoor and outdoor environment for the learning of science which is welcoming, stimulating, accessible, safe secure and challenging
- Provide science resources which are:
  - Of good quality
  - Developmentally appropriate
  - Well organised and accessible
  - Free from gender and culture stereotyping
- Provides sufficient time for all children to pursue their own independent and scientific explorations in depth and at their own rate
- Teach a carefully planned and structured set of learning experiences that ensure the children's learning progresses as they move through the EYFS and Key Stage 1

CONTENT

In planning for the teaching and learning in science, staff should refer to the National Curriculum documents, the EYFS and the programmes of study.

Throughout the EYFS science activities are planned for through the area of learning – Knowledge and Understanding of the World. All children are given opportunities for developing effectively their knowledge and understanding of the world through:

- Activities based on first-hand experiences that encourage exploration, observation, problem solving, prediction, critical thinking, decision making and discussion
- An environment with a wide range of activities indoors and outdoors that stimulate children's interest and curiosity

- Adult support in helping children communicate and record orally and in other ways

The objectives of the EYFS for exploration and investigation are:

- Investigate objects and materials by using all of their senses as appropriate
- Find out about, and identify, some features of living things, objects and events they observe
- Look closely at similarities, differences, patterns and change
- Ask questions about how things happen and how things work

At Key Stage 1, Years 1 and 2 use the NC guidelines best suited to their overall curriculum topic.

The programmes of study for Years 1 and 2 are as follows:

Suggested topic	Autumn 1	Autumn 2
Year 1	Animals including Humans- Herbivore, carnivore, omnivore	Autumn Light/dark/Moon
Year 2	Habitats	Ourselves- Health and growth

Suggested topic	Spring 1	Spring 2
Year 1	Materials	Plants- identify, name and label the basic structure
Year 2	Grouping and changing materials	Grouping and changing materials

Suggested topic	Summer 1	Summer 2
Year 1	Animals- comparing Classification of animals	Seasonal change Recap Variation
Year 2	Plants and animals in the local environment	

EQUAL OPPORTUNITIES

The science curriculum plays an important part in promoting equality of access to science education for all pupils within our school – All staff are aware of the physical, sensory, cognitive and emotional development and needs of their pupils. Learning objectives and a variety of science activities are planned for to meet the needs of different pupils.

Planning for access to science is addressed through –

- Whole school policy
- Medium Term plans/topic based
- Short term plans
- Setting targets for learning
- Differentiation of activities by outcome
- Appropriate and realistic level of adult support
- Adjustment of pace and performance expectations
- Use of peer support in cooperative tasks
- Individual Education plans (see SEN policy)

LA agencies and the school SENDCO will also be able to advise staff on planning science activities, including adapted equipment, for pupils with an IEP with specified targets

Gifted and talented

Science at FIS is usually taught in topics or contexts. It is vital to enrich and extend the curriculum for pupils who are gifted in science by using a variety of methods, depending on the context eg.

- Sharing and encouraging pupils' curiosity, allowing them to speculate without necessarily needing the correct answer
- Applying a higher level of skill to a common question or problem to be solved by the whole class
- Giving pupils access to more demanding texts or ICT-based information for research
- Challenging pupils to provide explanations and connections as well as information.