

# Newton Flotman Primary School



## Science Policy

Policy agreed by: \_\_\_\_\_

Date: \_\_\_\_\_

Review Date: \_\_\_\_\_

## Introduction

Science, for primary age children, means exploring, discovering and investigating the world around them. These activities help children gather the experience they need to understand the world in which we live.

Our main aim in teaching science is to develop enquiring minds and scientific approaches to investigation.

## Aims

Children will be encouraged to:

- Develop an interest and a positive attitude towards the world around them
- Develop the ability to pose questions and devise experiments or investigations to answer them
- Develop basic concepts and logical thinking
- Develop the ability to observe, explore, order and record observations clearly
- Appreciate patterns and relationships within nature
- Acquire knowledge, develop understanding, learn skills and apply them in other contexts
- Develop the ability to interpret and communicate findings

## Time allocation

Science is a core curriculum subject. By the end of Key Stage 1 we aim to spend 1.5 hours per week and at Key Stage 2, 2 hours per week. This may be taught as discrete lessons or linked in a themed approach with other National Curriculum areas. This makes it rather more problematic to assess the actual amount of time spent on the subject.

## Planning and links with other subjects

Science is usually based on Q.C.A. units of work at Key Stage 1 and 2. We recognise the cross curricular links with other subjects and aim to integrate them as appropriate to boost excellence and the children's enjoyment of learning.

## Teaching and Learning

Teachers will aim to give every pupil the opportunity to experience success in learning and to achieve as high a standard as possible. The National Curriculum programmes of study set out what most pupils should be taught at each Key Stage.

Children will be taught to explore, ask questions, predict, design and carry out investigations and evaluate their findings. They will be encouraged to

communicate their observations and findings to each other and a wider audience in a variety of ways.

ICT will be embedded as appropriate to enhance teaching and learning; for example the use of a data projector and SMART Board, laptops, digital camera, digital microscopes, dataloggers and the internet all add to the learning experience.

Science teaching may take a variety of formats including cooperative group work, paired, individual and whole class teaching. Each will be used where and when appropriate.

### Safety

Children will be taught to act in a responsible and safe way. Teachers need to know about safety in the school and will refer to county guidelines and the "Be Safe" A.S.E. publication which is located in the resources room.

### Support Staff

Teaching assistants enrich the learning experience of an individual or group of children. Where possible, planning should take account of their time.

### Special Educational Needs

Teachers will plan their approaches to teaching and learning so that all pupils can take part in lessons fully and effectively with work differentiated to enable access for both children with serious learning difficulties as well as those recognised as being on the gifted and talented register as appropriate.

### Equal Opportunities

Particular attention will be given to equal opportunities in science, for example, encouraging all children, irrespective of gender, to play an active and co-operative part in all aspects of science. Where appropriate, the curriculum will be modified to ensure equal access.

We are aware of the importance of positive role models within a child's development and will endeavour to remove stereotyping by promoting role models of both sexes and a variety of ethnicities.

### Assessment and Recording

Recording by pupils may take many forms – written, drawn, painted, acted out in drama, poetry, charts and graphs, databases, spreadsheets, group presentations, video, digital photography and Powerpoint.

Assessment will be continuous and formative, achieved through ongoing observation and discussion with the child. Teachers assess and record progress using continuous assessment and end of unit assessments.

Each child does a piece of science work in the special book each term.

## Resources

- Topic Boxes –related to QCA units of work
- Science Directions Scheme
- Posters
- Intel microscopes
- Pond nets and work for environmental projects
- Rainbow Electricity Kit
- Use of 2 small cookers to heat materials
- The village & river
- Laptop trolley
- Classroom computers

A loan system from the High School (see attached list)

A loan system from the Science and Technology centre

TSN Loan List

Science Clips

Videos / DVDs