

# Science Policy September 2016-2019

We live in an increasingly scientific and technological age where students need to acquire the knowledge, skills and attitudes to prepare them for life in the 21st century. At Wavell Community Junior School, we believe that the teaching of Science develops in students an interest and curiosity about the world in which they live; and fosters in them a respect for the environment.

#### **Introduction**

This policy is written for the staff, governors and parents to ensure that they understand and agree the approach to Science within the National Curriculum. It sets out the school's aims, principles and strategies for the delivery, assessment and record keeping of Science.

# Aims of teaching Science

- Equip students to use themselves as starting points for learning about science, and to build on their enthusiasm and natural sense of wonder about the world.
- Develop through practical work the skills of observation, prediction, investigation, interpretation, communication, questioning and hypothesizing, and increased use of precise measurement skills and ICT.
- Encourage and enable students to offer their own suggestions, and to be creative in their approach to science, and to gain enjoyment from their scientific work.
- Enable students to develop their skills of co-operation through working with others, and to encourage where possible, ways for them to explore science which are relevant and meaningful to them.
- Teach scientific enquiry through contexts taken from the National Curriculum for Science.
- Encourage students to collect relevant evidence and to question outcome and to persevere.
- Encourage students to treat the living and non-living environment with respect and sensitivity.
- Stress the need for personal and group safety by the correct usage and storage of resources.
- To enable students to appreciate that we do not always know the answers and results when carrying out scientific enquiry.

Our scheme of work emphasises:

- The school's local context.
- Environmental and sustainable understanding.
- The global experiences of the students' lives.

# **Teaching of Science**

The teaching at Wavell ensures that science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Through the units of work, the students will acquire and develop these skills throughout their Primary years.

- Science promotes communication in a specific and precise language involving mathematical and logical thinking.
- They work individually, in pairs, in groups and as a class.
- Students develop ways of finding out for themselves and get practice in problem solving.
- They are taken on relevant school trips to science-specific places e.g. museums, environmental areas.
- As they become more proficient in selecting and using scientific equipment and collating and interpreting results they will become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Science fosters a healthy curiosity in students about our universe and promotes respect for the living and non-living.



- It allows students to develop original ideas and a questioning attitude.
- They are encouraged to share their experiences of the wider world and its communities.

# Learning

Our students learn best when:

- They have access to first hand resources and equipment.
- They have the chance to explore themselves and draw their own conclusions.
- They develop independent investigative and problem solving skills.
- They are able to use non-fiction books for research.
- They are shown, or use independently, ICT resources.
- Visitors are invited to the school.

# Assessment and Monitoring progress.

Students are assessed on completion of each topic against the scientific skills covered Achievement will be evaluated on the basis of whether the students are learning to their full potential.

Monitoring will take place in the following ways:

- Analysis of student's work.
- Talking with the students.
- Lesson observations.
- Talking with teachers and looking at planning.

# <u>Review</u>

The Science policy is reviewed on a regular basis as part of the ongoing curriculum monitoring programme.

# **Roles and Responsibilities**

The Assistant Headteacher (Curriculum) will be responsible for:

- Feedback to the Senior Leadership Team on monitoring undertaken by the Curriculum Leader.
- Supporting the Curriculum Leader in carrying out their roles and responsibilities.
- Allocating appropriate budgets.

The Curriculum Leader will be responsible for:

- Reviewing and updating the Science scheme of work and the policy.
- Monitoring teaching and learning of Science on a regular basis.
- Purchasing Science resources.
- Auditing and organising Science resources in liaison with the year leaders.
- Offering support, advice and INSET (when appropriate) on possible teaching activities to all staff.

# Teachers will be responsible for:

- Including effective Science teaching activities and skills in their planning.
- Assessment and levelling students as laid down in the National Curriculum attainment targets for Science.
- Informing the subject leader of any resources required for their particularly year group.