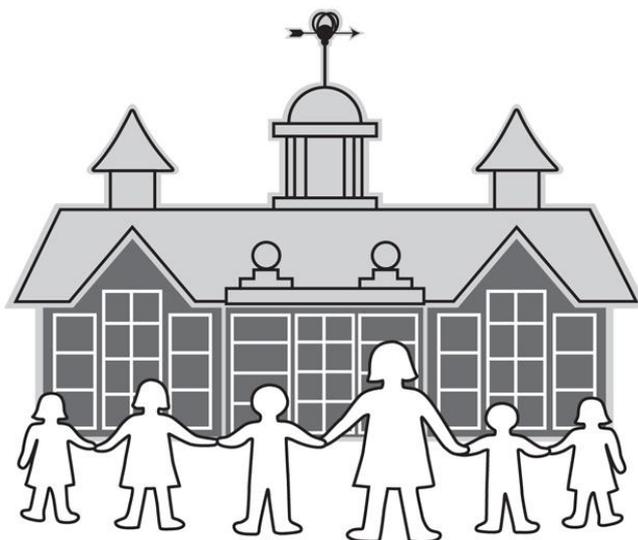


North Ealing Primary School



Science Policy 2016

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|---|-------------------|
| School lead for this policy: | L Page & J Burton |
| Committee with oversight for this policy - Curriculum & Standards | Curriculum |
| Policy to be approved by the Headteacher | Spring 2016 |
| Policy last reviewed by the Curriculum & Standards Committee | Spring 2016 |
| Policy last ratified and adopted by the Headteacher | Spring 2016 |
| Policy / Document due for review | Spring 2020 |

North Ealing Primary School

Science Policy

Statement of Intent:

"Science is an integral part of modern culture. It stretches the imagination and creativity of young people. Its challenges are quite enormous," - Professor Malcolm Longair.

"The joy of discovery is certainly the liveliest that the mind of man can ever feel," - Claude Bernard. (1813-78)

Introduction

This policy outlines the teaching, organisation and management of science taught at North Ealing Primary School. The school's policy for science is based on the new primary curriculum which is statutory from September 2014. The implementation of this policy is the responsibility of all teaching staff.

Teaching Science

At North Ealing we believe that the best science teaching fosters and develops pupils' curiosity in the subject whilst also helping them to fulfil their potential. For our pupils to achieve well in science, they need to acquire the necessary scientific knowledge and also be able to enjoy the experience of engaging and purposeful scientific enquiry in order to help them to answer scientific questions about the world around them.

The new National Curriculum 2014 states why we teach science in schools:

'A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics...Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.'

Aims

Through high-quality science teaching, we aim to help our pupils understand how major scientific ideas have played a vital role in society. Moreover, we aim to prepare our pupils for life in an increasingly scientific and technological world.

We aim to do this by:

- Delivering high quality, interesting and engaging science lessons;
- Using scientific contexts to develop and consolidate cross curricular skills in literacy, Maths and ICT;
- Teaching science in a global and historical context; including the contributions significant scientists from a range of cultures;
- Developing and extending pupils' scientific knowledge and understanding;
- Developing pupils' ability to work scientifically and involve pupils in planning, carrying out and evaluating investigations;
- Developing pupils' scientific vocabulary and ability to articulate scientific concepts clearly and precisely;

- Ensuring that all pupils are appropriately challenged to make good progress in science.

Teaching and Learning

At North Ealing, teachers plan and deliver high-quality and engaging science lessons incorporating a range of teaching and learning styles. At North Ealing teachers will provide opportunities for pupils to:

- Learn about science, where possible, through first-hand practical experiences;
- Develop their research skills through the appropriate use of secondary sources;
- Work collaboratively in pairs, groups and/or individually;
- Plan and carry out investigations with an increasing systematic approach as they progress through the school;
- Develop their questioning, predicting, observing, measuring and interpreting skills;
- Record their work in a variety of ways e.g. writing, diagrams, graphs, tables;
- Read and spell scientific vocabulary appropriate for their age.
- Be motivated and inspired by engaging and interactive science displays which include key vocabulary and relevant questions.
- Learn about science using the outdoor learning environment.

Planning

- Science in the Early Years Foundation Stage is planned using the Early Years Curriculum 'Understanding of the World'.
- Key Stage 1 and 2 teachers plan science lessons using the new National Curriculum (2014).
- All science lessons have focussed learning objectives, clear differentiation and success criteria to ensure that pupils make at least good progress.
- 'Working scientifically' is embedded throughout the areas of learning in key stage 1 and 2; this focuses on the key aspects of scientific enquiry which enable pupils to investigate and answer scientific questions.
- Areas of learning within key stage 1 and 2 ensure that statutory requirements are being covered through the specific disciplines of biology, chemistry and physics (teachers may also refer to the non-statutory guidance which provide additional support).
- Please refer to the overview for details of the specific areas of learning covered in each year group over the year.

Monitoring

- Science is monitored by the Senior Leadership team regularly as part of the whole school triangulation process
- Planning and work book scrutiny is also carried out regularly by the science subject leader and feedback is given to teachers at an appropriate time.

Health and safety

- Teachers must plan safe activities for science and complete a risk assessment if necessary.

- Teachers and teaching assistants need to be aware of health and safety procedures when using equipment/food in science lessons.
- Pupils must be aware of the need for personal safety and the safety of others during science lessons.

Inclusion

At North Ealing teachers ensure that they adopt an inclusive approach to their science planning and teaching; ensuring that pupils of all abilities and backgrounds have an equal opportunity to make good progress and enjoy science.

Impact

Through the teaching of Science, children gain a knowledge and awareness of the world around them. By regularly timetabling Science each week the pupils' achievement can progress and be regularly monitored and assessed.

Impact can be measured through end of Topic Assessments, Classroom Monitor records and Teacher Evaluations (presented to The Science Co-ordinator at the end of each term).

Science Assemblies/Science Week also helps to raise the subjects profile within the School.

Safety

- When undertaking practical tasks, teachers and pupils must recognise and assess any hazards and risks.
- Pupils are taught to care for and use science equipment correctly.
- The school is a member of the Consortium of Local Education Authority Provision for Science in Schools (CLEAPSS) an association providing schools with information on all aspects of teaching science safely.
- All staff are made aware of hazardous substances through the Control of Harmful & Hazardous Substances Handbook (COHHS). This is monitored annually and staff can refer to the documentation as needed.

Resources

- The Science Coordinators and The Science Advisory Team are available for support where needed.
- Resources for each unit are stored in appropriate year groups or in the lower staff room
- Useful websites are incorporated into lessons through the use of the Interactive Whiteboard.
- The subject leader must be informed of any changes regarding science resources i.e. missing or broken resources and/or when new or replacement resources are required.

Assessment and Record Keeping

- Achievements are recorded using a wide variety of methods providing all children with an opportunity to demonstrate their knowledge and understanding.
- In Nursery and Reception all work is directly linked to the EYFS curriculum. Classroom Monitor is used to record assessments in Nursery and Reception.

- All work in KS1 and KS2 are directly linked to the NC14 scheme of work and attainment is recorded on Classroom Monitor to enable pupils' work to be measured against expected outcomes.

Homework

- Homework is set for pupils in Years 5 and 6 as a follow up to class work, as an extension activity, or to prepare for future tasks.
- Parents are informed about and become involved in their child's learning through the tasks set.

See also School Policies on:

- Teaching and Learning
- Assessment and Record Keeping
- Inclusion
- SEN
- A&T
- Health and Safety
- Foundation Stage
- Marking

Documents drawn on:

- National Curriculum 2014
- EYFS curriculum
- NES Science Policy
- Non-Statutory Guidance