



Science Policy 2020/1

Introduction

This policy outlines the teaching, organisation and management of science at Fairlawn Primary School. The school's policy for science is based on the 2014 Curriculum for Key Stages 1 and 2 and the Early Years Foundation Stage Framework, and aims to ensure that all children:

- Develop their scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- Develop their understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.
- Are equipped with the scientific knowledge required to understand the uses of implications of science, today and for the future.

The Curriculum

At Fairlawn, we use the Science Bug resource as a starting point for our science planning. We adapt the plans to meet the needs of the children and provide challenge for all. Science is taught as a discrete subject for an hour and a half per week (Years 1-6).

Teaching and learning in science

Pupil exploration and working scientifically are at the heart of our science teaching. We encourage the children to ask, as well as answer, scientific questions. We also encourage our children to talk like scientists through the use of appropriate scientific vocabulary.

Each class has a science 'Wonder Wall' where children can post and answer questions throughout the unit of learning.

Early Years Foundation Stage

We teach scientific skills in the reception class as an integral part of the topic learning covered during the year. We relate the scientific aspects of the children's learning to the objectives set out in the Early Years Outcomes. Science makes a significant contribution to achieving the Early Years Outcomes and Understanding of the World, e.g. through investigating what floats and what sinks when placed in water.

Assessment and recording

We use assessment for learning throughout our science lessons to move children's learning on. Science learning is marked in line with the feedback policy, and children are given time to complete any Green Pen Learning at the start of each session.

At the start of each science unit, the children are given an 'Objectives Poster' to stick into their books. This summarises the knowledge and skills the children will be taught throughout the unit. The teacher uses these posters to tick off when children have achieved the objectives. A double tick means they have achieved the objective, a single tick means they have partially achieved the objective and no tick means the objective hasn't been achieved. If necessary, the teacher will annotate any objectives that haven't been achieved with next steps.

Each child has a 'Curriculum Map' which summarises the knowledge and skills the child will be taught throughout the unit. Teachers will use formative assessment strategies within lessons to find misconceptions and to help plan according to the children's strengths and areas for development. At the end of each unit, teachers complete an assessment of their classes learning, listening to the children who are at working towards, expected and greater depth. They also highlight any areas that need to be continued or gaps in children's learning. This is then passed on to the science subject leader for monitoring.

These summative assessments are used to help inform a termly assessment that each teacher makes. This termly assessment is put on to our Assessment Spreadsheets and is a green or red rating for attainment. Green means that the child is achieving at expected and red means the child is performing below the expected level. These assessments are monitored by the science subject leader.

Resources

Each science unit is allocated a box where resources are centrally stored. If any resources are required, the teachers are to order via the science subject leader.

In addition to the resources based in school, we also use a variety of outside agencies to enrich the children's experience of science, as well as utilising our membership with Islington Library Services.

Monitoring and review

Monitoring of the standards of children's learning and of the quality of teaching in Science is the responsibility of the science leader. The work of the science leader also involves supporting colleagues in the teaching of Science, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.

Health and Safety

It is important that children are taught to handle equipment safely when working scientifically. It is the teacher's responsibility to make sure that all additional adults are aware of safety implications connected with any science activity they are undertaking and that any risks have been assessed and managed. If the teacher is unsure of how to manage the risks of particular equipment, they are to speak to the Health and Safety lead for advice.

Signed: Robert Evans
Date: September 2021