Fazakerley Primary School

Formosa Drive, Liverpool, L10 7LD

Science Vision

Intent and Design

At Fazakerley Primary School, working scientifically is at the core of our science lessons. We believe that providing a high-quality science education allows for the greater understanding of the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to our community, country and world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science.

By continually questioning the experimental design, children can leave Fazakerley Primary with a high level of critical and evaluative thinking which can be transferred to all areas of the curriculum.

Children are naturally curious and passionate about learning. At Fazakerley Primary School, we provide a stimulating science curriculum that nurtures this curiosity and allows pupils to ask questions and develop the skills they need to answer those questions.

From a young age, children are encouraged to aim high in science and understand how it can be used to explain what is occurring, predict how things will behave, and analyse causes. In Fazakerley, the children are inspired to consider careers linked to STEM (science, technology, engineering & mathematics) so they can be involved in the world's future scientific and technological developments.

Our three main science aims:

- To develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- To develop 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.
- That all children are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Science **vocabulary** is an important tool to aid learning, understanding and articulating scientific concepts clearly and precisely. Vocabulary is taught discreetly within science lessons to ensure children have a deep understanding and the skills required to progress. This vocabulary is then continually referred to, both within the school environment and in cross-curricular lessons.

We live in a city rich with science facilities and world class establishments that people travel far and wide to visit or work in. In Fazakerley Primary, we take advantage of links to other schools and outside agencies, organisations, communities to enrich science teaching and learning but also inspire their immediate and future **aspirations**.



Implementation

At Fazakerley Primary School, we believe that through the study of Science children develop a sense of the world around them. It is not merely the rote learning of facts, but rather the development of a way of looking at the world around them and of questioning what they see.

At Fazakerley Primary School, we believe that the natural curiosity of children can be harnessed, and we aim to develop and channel their desire to look, hold, touch and understand what is around them. Science is a core subject of the National Curriculum and children are expected to acquire a specific body of knowledge but also to develop their ability to work scientifically (raise questions, devise fair tests and respond to their findings). At Fazakerley Primary School, it is intended that through the study of Science the children will become better equipped to make reasoned judgements that will benefit them in their everyday lives. Teachers will use national curriculum objectives in Key Stage One and Two to plan and teach science lessons discretely usually in two-week blocks; using a range of resources to support their planning, teaching and assessment.

The teachers will deliver lessons that will develop the children's scientific skills and knowledge. Through these lessons, the children will be provided with relevant experiences in a variety of situations. In doing so, we hope to increase children's independence and develop their process skills, concepts and attitude towards their learning. It is the responsibility of each teacher to ensure that wherever possible all children experience all Learning Objectives but at a level appropriate to their ability. We challenge the ability of all of our children and encourage them to reach their fullest potential.

Resources are stored and readily accessible to staff members. The equipment is boxed and labelled either as part of a topic or as general equipment. All books and support materials directly relevant to the topics are centrally stored. A selection of teachers support texts are available. A selection of texts that will enhance children's learning can be found in the school or class library.

Impact

In Fazakerley, it is the responsibility of the subject leader to monitor the standards of children's work and the quality of teaching in science termly to ensure progression and ensure our environment is fully meeting the needs of our children. The subject leader is also responsible for supporting colleagues in their teaching, for being informed about current developments in the subject, and for providing a strategic lead and direction for science in the school.

The science coordinator gives the Head teacher a regular subject leader report in which she evaluates strengths and weaknesses in science and indicates areas for further improvement. The subject leader has speciallyallocated time for fulfilling the vital task of reviewing samples of children's work and visiting classes to observe science teaching.

