



The Teaching of Science

The National Curriculum of England for Key Stage 1 and 2 states that the teaching of science is a core subject, alongside that of English and maths. The overarching aims of the teaching of science are to ensure that all pupils:

◇develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics

◇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

◇are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Within the Early Years Foundation Stage children are working towards the Early Learning Goals as set out by the government in the statutory framework for the Early Years Foundation Stage. This document states there are 7 areas of learning. The Teaching of Science in the EYFS broadly falls into the area of Understanding the world, which involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment.

At Thorp Primary school in Key Stage 1 pupils observe, explore and ask questions about living things, materials and physical phenomena. They begin to work together to collect evidence to help them answer questions and to link this to simple scientific ideas. They begin to evaluate evidence and consider whether tests or comparisons are fair. They use reference materials to find out more about scientific ideas. They share ideas and communicate them using scientific language, drawings, charts and tables.

At Key Stage 2 pupils learn about a wider range of living things, materials and physical phenomena. They make links between ideas and explain things using simple models and theories. They apply their knowledge and understanding of scientific ideas to familiar phenomena, everyday things and their personal health. They think about the effects of scientific and technological developments on the environment and in other contexts. They carry out more systematic investigations, working on their own and with others. They use a range of reference sources in their work. They talk about their work and its significance, using a wide range of scientific language, conventional diagrams, charts and graphs. In Key Stage 2 links are also made with the Regional Science Centre Oldham, where children either get the opportunity to visit the centre and experience what it is like to work in a real laboratory or the centre comes into the classroom and works with the children in school.

Teaching and learning

At Thorp we plan lessons to inspire the pupils to experiment and investigate the world around them and to help them raise their own questions such as “Why...?”, “How...?” and “What happens if...?”

Lessons develop the skills of enquiry, observation, locating sources of information, selecting appropriate equipment and using it safely, measuring and checking results, and making comparisons

and communicating results and findings. As a school we study a range of scientists, male and female, from different nationalities and past and present. We ensure our lessons make effective links with other curriculum areas and subjects, please refer to the curriculum topic maps in each year group to see the specifics.

Pupils have frequent opportunities to develop their skills in, and take responsibility for, planning investigative work, selecting relevant resources, making decisions about sources of information, carry out activities safely and decide on the best form of communicating their findings.