Hockley Primary School

Science Curriculum- Planning, Teaching and Assessment

A high quality Science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Ultimately, this enables children to enter a necessary world of investigation, exploration and discovery, in preparation for their role as successful members of society. Science is vital to the world's future prosperity, and with this in mind, Hockley Primary School aims to develop a natural sense of curiosity in children, as well as prediction, explanation, understanding and the analysis of causes. Foundational knowledge and concepts are essential in this process towards becoming confident and fluent in the nature, processes and methods of Science, and so there are rigorous and exciting programmes of study taught which encompass a sequence of knowledge and concepts in preparation for the future.

The teaching of Science in the National Curriculum is organised into four separate areas, called attainment targets:

- scientific investigation;
- life and living process;
- materials and their properties;
- physical processes.

Key Stage 1

Aims/ Focus: To enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them.

Year 1

Programme of Study for Year 1: Plants, Animals- including humans, Everyday Materials, Seasonal Changes.

Year 2

Programme of Study for Year 2: Living things and their habitats, Plants, Animals- including humans, Use of everyday Materials.

Working Scientifically is an essential element which runs throughout each of these programmes of study, and involves scientific enquiry, practical activities and scientific questioning in Key Stage 1.

Lower Key Stage 2

Aims/ Focus: To enable pupils to broaden their scientific view of the world around them through exploration, reasoning, testing and developing ideas.

Year 3

Programme of Study for Year 3: Plants, Animals-including humans, Rocks, Light, Forces and Magnets.

Year 4

Programme of Study for Year 4: Living things and their habitats, Animals- including humans, States of Matter, Sound, and Electricity.

Working scientifically in lower key stage 2 involves a range of scientific experiences, and opportunities to observe, enquire, compare, record, classify, conclude and present.

Upper Key Stage 2

Aims/ Focus: To enable pupils to develop a deeper understanding of a wide range of scientific ideas through exploring, reasoning, and the creation of their own ideas, enquiries and questions into phenomena, as well as analysing functions, relationships and interactions more systematically.

Year 5

Programme of study for Year 5: Living things and their habitats, Animals-including humans, Properties and changes of materials, Earth and Space, Forces.

Year 6

Programme of study for Year 6: Living things and their habitats, Animals-including humans, Evolution and Inheritance, Light, Electricity.

Working scientifically in upper key stage 2 involves planning and carrying out investigations, using a range of scientific equipment, recording, analysing and comparing data, reporting, presenting, and identifying creditable scientific evidence with which to support or refute ideas/ arguments.

Organisation

Hockley Primary School works on a two year rolling programme, due to classes being vertically streamed (Years 1/2, Years 3/4 and Years 5/6), and so, planning ensures that children in each year are given consistent opportunities to consolidate skills and progress within each area.

Hockley Primary School not only ensures that programmes of study are covered extensively and creatively, but aims to ignite pupils' curiosity through building upon individual interests and avenues of enquiry.