

## **Science Intent:**

At Fairfield's Primary School, we recognise the importance of science in every aspect of daily life and ensure it is embedded throughout our curriculum.

The scientific area of learning is concerned with increasing pupils' knowledge and understanding of our world and with developing skills associated with science as a process of enquiry, to develop the child's full potential. It will develop the natural curiosity of the child, encourage respect for living organisms and the physical environment, and provide opportunities for critical evaluation of evidence.

At Fairfield's, in conjunction with the aims of the national curriculum, our science teaching offers the opportunity for children to:

- Develop scientific knowledge and conceptual understanding through the covers of the national curriculum strands.
- Develop understanding of the nature, processes and method of science through different types of scientific enquiry that help them to answer scientific questions about the world around them.
- Be equipped with the scientific knowledge to understand the uses and implication of science today and the future through topical discussion about the wider world.
- Develop the essential scientific enquiry skills to deepen their scientific knowledge.
- Use a range of methods to communicate their scientific information and present it in a systematic scientific matter, including ICT, diagrams, graphs and charts.
- Develop a respect for the materials and the equipment they handle with regards to their own and other children's safety.
- Develop an enthusiasm and enjoyment of scientific learning and discovery.

The national curriculum will provide a structure for development of skills for the science being taught throughout the school, which is linked where possible to the topic themes to provide a creative scheme of work, which reflects a balanced programme of study.

## **Implementation:**

At Fairfield, where possible, science is linked to topics; where this is not possible, science is taught as discrete units to ensure coverage. The national curriculum strands form the starting point for each unit and these are adapted and extended where required to meet the needs of the pupils. Teachers will use the start of each unit to elicit the children's knowledge and encourage them to reflect on what they already know, this then forms the starting point to ensure a progressive curriculum. Children's prior knowledge and key vocabulary for each unit is affixed to the pupil's books as part of their topic front cover; children use this as a reference point to mark the start of their learning journey and as a reference for key vocabulary throughout.

Fairfield offers a range of practical experiences using both outdoor and indoor space to engage children with their science learning. We ensure investigative skills are embedded throughout the curriculum and display material is found in every classroom to ensure consistency across the school. We offer our pupils the opportunity to broaden and enrich their scientific knowledge through school trips, workshops and whole school science week, giving our children memorable experiences.

## *Assessment:*

The disciplinary knowledge for each year group is articulated into accessible and child-friendly language via our working scientifically wheels. These are displayed and dated in every classroom and stuck in the front of the books as a reference point. These are used to track scientific enquiry skills and ensure a balanced coverage throughout the year. Teachers continuously assess the skills and evidence will come from observations, verbal responses and written work. At the end of each science unit, children carry out an independent working scientific task to demonstrate their disciplinary knowledge.

Children's substantive knowledge is assessed against the age-related expectations for science, these form clear end points at the end of each topic. To identify the knowledge the children have remembered, they complete a topic test at the end of each unit of work. Assessment files have been set up for teachers to record test scores, and any areas of the curriculum the children need to develop further. This information is passed up to the next teacher, to ensure the children are taught from their point of understanding and to avoid any unnecessary repetition.

***SEND:***

Lessons are adapted appropriately to meet the needs of all pupils and ensure an inclusive curriculum. Some of these adaptations may include; differentiated activities, adult support, mixed ability seating, word banks and pre-prepared sentences for children to complete.

**Impact:**

At Fairfields, through discussions with the children we have learnt that they enjoy science and are enthusiastic about the subject. The impact of our science curriculum is that our learners are equipped with the scientific skills and knowledge that will enable them to be ready for the secondary curriculum and for life as an adult in the world outside the classroom. Children will be able to demonstrate their ability to interpret scientific thinking and suggest ways in which they might explore a scientific principle. Book looks occur every term to demonstrate the curriculum is being covered in addition to various lesson samples.