Subject Profile

Science

Oracy, Aspirations and Experiences underpin our curriculum decisions and support the school principles of A-E (adaptive, building connections, consistency, development and excellence.).

Intent

Ensure children are provided with a knowledge-rich curriculum from age two and beyond.

Develop their scientific knowledge and understanding through the disciplines of Biology, Chemistry and Physics.

Build Science Capital through trips and visitors, making links to our local area motivating and engaging.

Deliver a curriculum that inspires a sense of excitement and curiosity about natural phenomena.

Explicitly teach substantive and disciplinary knowledge and allow pupils to revisit and built on these each year.

Implementation

Strong Foundations

In the Early Years, children are constantly exploring the world around them. They are immersed in a rich environment with plenty of opportunity to follow their interests. Children explore and answer questions about space, plants, themselves and animals throughout each area of study which will prepare them for the National Curriculum in Year 1 and beyond.

Vocabulary

Children are immersed in scientific vocabulary from the beginning of their journey. Children are expected to read, spell and pronounce scientific vocabulary accurately and **consistently.** Children are taught to articulate scientifically through metacognition. We want children to **build connections** between science and the world they see around them valuing its importance in the future.

Being Curious

Teacher-directed instruction leads to **excellence** in learning but practical work is also used purposefully to draw attention to substantive or disciplinary science and only when children's understanding has been **developed.** We build Science Capital for all individuals by visiting places of scientific interest, allowing children to meet experts within the fields and teaching them about famous scientists throughout history.

Working Scientifically

In EYFS, children are given frequent opportunities to explore, observe and ask questions about the natural world. In KS1, children build on this and begin to identify, classify and perform simple tests. In KS2, children become more proficient and independent. They perform tests using equipment and present their findings in a variety of ways such as diagrams, graphs and oral and written presentations. There is a body of knowledge detailing the what, when, where and how, who and why of working scientifically that is important. This is referred to as disciplinary knowledge and should be taught in tandem with substantive knowledge: the core facts and concepts of the curriculum.

Adaptive | Building connections | Consistency | Development | Excellence