



Science at Middlethorpe Primary Academy

Intent

Our Science curriculum aims to provide the foundations for understanding the world through the specific disciplines of biology, chemistry and physics.

The national curriculum for science aims 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;

We aim to motivate and inspire children through a curriculum that stimulates, engages and challenges all learners. Our curriculum aims to develop key scientific knowledge and concepts, whilst instilling a sense of excitement and curiosity about natural phenomena.

Science at Middlethorpe Primary Academy is designed to deepen knowledge and develop skills, with literacy at the heart, ensuring effective progression across all year groups. Specialist vocabulary for science units is taught and built upon, and effective questioning to communicate ideas is encouraged.

Implementation

In Science, we implement an inclusive curriculum that meets the statutory requirements of the National Curriculum.

Our curriculum is well-planned and provides literacy-rich, cross-curricular opportunities. This allows the children to also apply their mathematical knowledge to enhance their understanding of Science. Working scientifically skills are built into lessons, in order to embed scientific understanding.

At the beginning of each Science unit, children demonstrate their prior knowledge through the effective use of retrieval practice, which informs planning and teaching. A series of stimulating lessons are planned, with clear knowledge and skills-based

learning objectives and subject-specific vocabulary, which is included on the termly knowledge organisers. Post learning tasks are planned to demonstrate progress, knowledge and understanding. Teachers assess learning in Science against knowledge-based and skill-based learning objectives.

Our curriculum is delivered through highly effective 'quality first teaching'. Enrichment opportunities, including outdoor learning, inspirational visitors and exciting educational visits, provide our children with rich experiences and enhance teaching, learning and knowledge.

Impact

Our well-planned Science curriculum ensures that children are given essential knowledge, skills and concepts to understand how science can be used to explain what is occurring, how things behave and to analyse causes.

All pupils' learning is progressive, developmental and most of all stimulating to their general interest. Children develop the skills of creativity, perseverance and co-operation to enhance their ability to learn confidently in the whole curriculum.