

Nelson Academy Science Curriculum 2021/22

Science is an important part of our daily lives and vital to the world's future prosperity. All pupils should be taught the essential knowledge, methods and processes to enable them to become scientists as well as having an understanding of the real-world applications of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Science in our school is about developing children's understanding of the world around them as well as developing the scientific enquiry skills to enable them to make sense of the world in which they live. The staff at Nelson ensure that all children are exposed to high-quality teaching and learning experiences, which allow children to explore their outdoor environment and engage with practical scientific enquiry. They are immersed in scientific vocabulary, which aids children's knowledge and understanding not only of the topic they are studying, but of the world around them. We intend to provide all children with a broad and balanced science curriculum.

Science teaching at Nelson Academy involves adapting and extending the curriculum to match all pupils' needs. Science is taught as discrete units and lessons but links are made to the wider curriculum wherever possible.

We ensure that all children are provided with rich learning experiences that aim to:

- Prepare our children for life in an increasingly scientific and technological world today and in the future;
- Help our children acquire a growing understanding of the world around them and the methods that scientists use to ask and answer their scientific questions;
- Build on our children's natural curiosity and developing a scientific approach to problems;
- Encouraging open-mindedness, self-assessment, perseverance and developing enquiry skills – including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating;
- Develop the use of scientific language, recording and techniques;
- Make links between science and other subjects.

We have also implemented The Great Science Share where scientific enquiry is celebrated and children have the opportunity to pose their own scientific questions, think of ways to investigate them and then design and carry out their own investigations.

The impact and measure of this is to ensure children not only acquire the appropriate age-related knowledge linked to the science curriculum, but also the scientific enquiry skills which will equip them to be ready for the curriculum at Key Stage 3 and for life as an adult in the wider world.

All children will have:

- A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/investigative skills;
- A richer vocabulary which will enable to articulate their understanding of taught concepts; and
- High aspirations, which will see them through to further study, work and a successful adult life.