

## Science at Emneth Academy

### Intent

A high quality of science education helps to provide children with the foundations for understanding the world around them. Science is apparent in everyday life and it is vital for our children to gain a greater understanding of the world around them. Science has changed our lives and will continue to do so for our young people as they grow into adulthood and new discoveries, ideas and techniques are developed. It is vital that all pupils should be taught the essential aspects of knowledge, methods and uses of science. Through the development of knowledge in science children should be encouraged to be inquisitive about the subject as well as develop the ability to discuss and rationalise natural phenomena. Pupils should use science to explain what is occurring, predict how things will change or behave and analyse the causes.

Science in our school is about the children developing a curiosity of the world around them and being equipped with the knowledge and skills to act upon this curiosity through a practical and investigative approach. Children are exposed to science specific vocabulary which they can use to help understand and explain the world around them. Many of our pupils' future may be intertwined with science and so we aim to equip them with the best possible tools to be successful and give them the opportunity to pursue their developed curiosity further.

### Implementation

in ensuring high standards of teaching and learning in science, we implement a broad, balanced and progressive curriculum throughout the whole school. Planning of science is led by 'The National Curriculum programmes of study for Science 2014', 'Understanding of the World' in the Early Years Foundation Stage and the 'Academy Curriculum document 2019'. Teachers use these documents and work collaboratively to ensure a broad and extensive curriculum is delivered throughout the school that challenges and meets the needs of all pupils. Due to one form entry in our school, Science units are taught on a year rolling programme with guidance from the afore mentioned documents.

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 nature, processes and methods of scientific ideas.
- Help develop and extend our children's scientific concept of their world.
- Build on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and developing the skills of 3 investigation - including: observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Develop the use of scientific language, recording and techniques.
- Develop the use of computing in investigating and recording.
- Make links between science and other subjects

Science is explicitly taught once a week for up to two hours, but is discretely taught in many different contexts, this depends on the topics a class is covering or even the genre of writing being taught in literacy for example. Within the 'Academy Curriculum document' are a list of famous scientists for children to research and write a biography or fact file for.

### Impact

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 skills which equip them their everyday lives.

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.
- High aspirations, which will see them through to further study, work and a successful adult life.