

Science

What do we **intend** Science to look like at Monkfield Park?

At Monkfield we aim for children to develop a strong awareness of the world around them by understanding scientific processes. We also value children understanding the uses and implications of Science, today and for the future.

We embed scientific enquiry skill in each topic the children study. These topics are revisited and developed throughout their time at the school. Topics, such as Plants, are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.

The staff at Monkfield ensure that all children are exposed to high quality teaching and learning experiences. 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.

Children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based question

We intend to provide all children with a broad and balanced science curriculum throughout their time with us.

When **implementing** the Science curriculum you will see ...

In ensuring high standards of teaching and learning in science, we implement a curriculum that is progressive throughout the whole school.

Planning for science is a process in which all teachers are involved to ensure that the school gives full coverage of, 'The National Curriculum programmes of study for Science 2014' and, 'Understanding of the World' in the Early Years Foundation Stage. Science teaching at Monkfield Park involves adapting and extending the curriculum to match all pupils' needs. Where possible, Science is linked to class topics. Science is taught as discrete units and lessons where needed to ensure coverage. Teachers plan to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available.

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.

Why is Science important?

Science equips children with the knowledge and skills to be able to reason and investigate effectively. Science evokes curiosity, excitement and understanding about the world around them through the specific disciplines of biology, chemistry and physics whilst supporting the Fundamental British Values.

How Science will **impact** our learners.

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 to progress from their starting points, and within 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 them to articulate their understanding of taught concepts.
- High aspirations, which will see them through to further study, work and a successful adult life.