



**INTENT:**

At Merton Bank Primary School we believe that a high quality science education provides the foundations for understanding the world. Via a carefully planned and ambitious curriculum, teachers provide children with scientific knowledge and conceptual understanding. Children will develop an understanding of nature, processes and scientific methods. We ensure that the Working Scientifically skills are built upon and developed throughout the children's time at the school. The children can apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently and continue to ask questions and be curious about their surroundings. At Merton Bank, all children regardless of ethnic origin, gender, class, aptitude or disability, will be provided broad and balanced science curriculum.

**IMPLEMENTATION:**

A long term plan for science ensures that children are being taught a full science curriculum and that certain topics are covered in greater depth. For example the topic of 'plants' is taught in years one, two and three. The children can build on the scientific knowledge that they have acquired in each year. We begin each new lesson focusing on the scientific vocabulary that will be used that day. Children are given time to write the new words at the top of their page so they are able to refer to them throughout the lesson/topic. Key words are also displayed on the working wall. Teachers explain these key words and children are encouraged to use them in discussions and writing. Accurate spellings are taught and there is an expectation that children spell key words correctly. At the start of a new topic children are provided with knowledge organisers. These outline the key information and concepts that children are expected to learn by the end of the topic. Teachers provide children with the opportunities to ask question, investigate and then comment on what they have learnt through practical experiments, ensuring that children are obtaining skills to work scientifically.

At the end of a topic, children are given a quiz to complete, this gives a good indication of the amount of knowledge they have gained from that topic. The children will also be given a further quiz to complete later in the year to ensure that knowledge has been embedded. Class teachers will also track individual progress using an online tracking system. Book scrutinies, learning walks and lesson observations will be conducted by the subject leader to ensure that all children are being provided with a high quality science education.

In Early Years Foundation stage science is taught through 'Understanding of the world', practitioners set up areas or specific activities to develop children, curiosity, questioning and understanding. This is continuous throughout the year, the children are constantly provided with opportunities to further their understanding of the world. In KS1 and KS2 science is taught discretely. It is at the class teacher's discretion whether they teach science in a block or whether they teach it once a week. The teaching of science is adapted to meet the needs of each class.

Should we need to revert to home learning, all children have an individual login to Developing Experts. Teachers will be able to set and monitor the work being completed by students.

## **IMPACT:**

Science lessons are engaging, exciting and should provide children with a wealth of knowledge. As a result children are able to;

- Meet age related expectations in Science by the end of the year
- Explain what they have learnt using scientific language taught
- Expand on what they know to further understand the world
- Question ideas and reflect on knowledge
- Work collaboratively and practically to investigate and experiment
- Use the knowledge they have obtained previously to attempt to answer questions at the start of a new topic

The impact is measured through the use of assessment at the end of each topic.

**Written by: Imogen Milburn (Subject Leader)**

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***Nurturing a Love for Learning***