Science at Mansbridge:

Science at Mansbridge focusses on the use of scientific methods and enquiry to understand the world around them.

- *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.*
- *Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future*

Planning

- *Yearly overview*
- *Half-term overview to break up units*
- *Use of front cover sheets to keep track of coverage and key vocabulary used*

Teaching

We place a strong emphasis on disciplinary content and skills in our approach to teaching. We do not allow generic pedagogies such as: differentiation, over emphasis on making lessons exciting and group work etc to trump imparting powerful progressive disciplinary knowledge, content and skills. The sequencing of the planned components of learning are a golden thread throughout the lesson / lessons – new knowledge and skills build on what has been taught before and towards clearly defined curriculum end points.

In Key stage 1, children use basic scientific skills to learn a range of scientific concepts mainly based on animals, plants, seasons and the human body. They do this by carrying out simple investigation, sorting, observation and grouping activities and should begin to use simple scientific language to explain the concepts taught. Children are also encouraged to formulate simple questions that they find the answers to in order to help them understand the world around them.

In Key Stage 2 children should be developing their scientific skills further through planned investigations that they have formulated questions for and can draw conclusions to. They should also be using a large range of scientific vocabulary to explain what they have learnt and write up their investigations to show their knowledge and understanding. In Upper Key stage 2, children are encouraged to compare results, think about fair testing and be able to present their ideas to show their understanding.

Measuring impact / assessment

- *Use of assessment sheets to track progress each half-term.*
- *Work sampling to monitor the use of key vocabulary in explanations.*
- *Multiple choice questions at the end of each unit to see if the children have understood the key concept taught that half-term.*