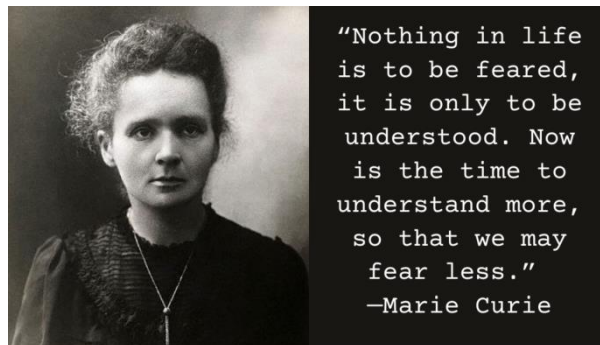


## Science



“Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less.”  
—Marie Curie

## Intent

At Warren Wood Primary School Science is a highly valued area of the curriculum and is taught in line with the National Curriculum. We believe that it is good practice for children to be encouraged to actively learn, by developing their own investigations based on ideas given by the teacher, and their own ideas. These ideas will be increasingly founded in scientific knowledge and understanding.

We want our children to:

- develop a natural curiosity about the world around them, engendering a sense of awe and wonder
- develop their scientific knowledge and understanding across the scientific disciplines of biology, chemistry and physics
- be able to build on prior knowledge and link ideas together
- confidently use scientific enquiry skills to answer scientific questions about the world around them

Our engagement with the local environment, including our Forest School area, ensures that children learn through varied and first-hand experiences of the world around them. Children are encouraged to continue their Science learning outside the classroom, and the school encourages parents to be involved with their children's Science learning. British Science Week is celebrated in school and ideas for simple Science activities are shared with families.

At Warren Wood we want to build on our children's Science Capital, allowing them to realise the relevance of science in the wider world, creating different opportunities for them to explore STEM and highlighting the possibilities for careers in Science.

## **Implementation**

- Science is a core subject and is therefore taught to all year groups from Nursery to Y6.
- Pupils will be taught a unit of work per half-term/term as set out in the long term plan.
- Science planning comes from a range of sources and is adapted to the needs of the cohort.
- Skills progression grids have been created to ensure that skills are covered in a comprehensive and progressive manner. These grids supplement planning.
- Planning ensures that the children are exposed to the five strands of working scientifically - observation over time, comparative and fair testing, identifying and classifying, pattern seeking, researching using secondary sources.
- Planning also ensures that children are exposed to the four major skill sets involved in working scientifically - taking measurements, making predictions, interpreting results and drawing conclusions.
- Lessons are planned to ensure that units of work are inclusive and accessible to all where possible. Additional challenge is also provided for those who are more able.
- There is an emphasis in Science on enquiry based learning.
- Teachers use a combination of observation, floor books and formative assessment to ascertain children's attainment.

## **Impact**

The successful approach to the teaching of Science at Warren Wood Primary School results in a fun, engaging, high quality Science education that provides children with the foundations for understanding the world that they can take with them once they complete their primary education. Our Golden Threads in Science combine skills and knowledge into concepts which allow our children to develop transferrable aptitudes between all their learning. Our Golden Threads are as follows: Question; Observe; Plan & Predict; Record & Report and Working Scientifically.

At Warren Wood, we have the following:

- A broad and engaging curriculum that makes use of a range of resources, such as visitors and local attractions.
- Children and staff who are enthusiastic about scientific learning.
- Children and staff who can speak confidently about Science, including uses in the real world.
- Children who can use appropriate scientific vocabulary in oral and written form.
- All children being successful in sharing their understanding of scientific concepts.
- Children who can make links between different areas of Science and other subject areas.
- Children who can recall prior scientific learning and use this to understand new learning.
- Children increasingly being able to instigate their own investigations and confidently interpret their findings.
- Staff who are able to anticipate potential misconceptions and address these confidently.
- Children meeting or exceeding their age-related expectations in Science.