

Greenlands Community Primary School



Science

Intent Statement

It is our intention at Greenlands Community Primary School to foster a love of learning and a lifelong interest in science and an understanding of how science has an impact on everyday life.

Our science curriculum fulfils the requirements of the National Curriculum for science as well as fosters our school values of respect, trust, compassion, aspiration, resilience and perseverance.

By delivering a high quality science education, we provide the children with the skills and knowledge, which enables them to understand and make sense of the world in which they live.

Teachers create a positive attitude to the teaching and learning of science. The children develop a sense of curiosity and excitement as well as a thirst for scientific enquiry, questioning and solving problems through a, practical hands on approach.

All our children are encouraged to fulfil their potential and become the scientists of the future.

The aims of our science curriculum include

Developing pupils' interest in, and enjoyment of, science. By building on children's curiosity, the science curriculum will help to instil a positive attitude towards science in pupils.

Delivering all the requirements of the national curriculum in relation to science and covering major scientific concepts.

Ensuring science lessons are purposeful, accurate and imaginative.

Ensuring pupils have sufficient scientific knowledge to understand both the uses and implications of science, today and in the future. This will also give pupils an appreciation of the changing nature of scientific knowledge.

The development of pupils' ability to pose questions, investigate these using correct techniques, accurately record their findings using appropriate scientific language and analyse their results.

Helping pupils develop the skills of prediction, hypothesising, experimentation, investigation, observation, measurement, interpretation and communication.

Making pupils aware of and alert to links between science and other school subjects, as well as their lives more generally.

Implementation

- There is a clear and comprehensive scheme of work (Plan Planning for Learning) that is in line with the requirements of the National Curriculum. Teaching and learning shows progression across all year groups and key stages (School's Science Progression Map).
- The children are taught key scientific vocabulary. They use and demonstrate their understanding of the language taught, through their written, mathematical and verbal communications.
- Science lessons are taught so that all children are included and supported
- The children use a range of resources to develop their knowledge and understanding that is integral to their learning and develop their understanding of working scientifically.
- Practical investigative opportunities are an integral part of the science lesson.
- Teachers carry out an informal risk assessment before conducting an experiment or undertaking practical activities. CLEAPS can be referred to find the answer to queries.
- Cross curricular links are made whenever possible.
- There is a science working wall in Key Stage One and Two classrooms
- The children build on prior knowledge and link ideas together, enabling them to question and become enquiry based learners.
- Science teaching and learning takes place outdoors and in the wider community whenever possible.
- Visits, visitors and science projects such as hatching chicks make learning more exciting for the children. It also helps them to understand how science is part of the wider world.
- Explore, Engage Extend by Tracy Tyrrell will be used in Key Stage Two at the beginning of each topic as a formative assessment tool. In Key Stage One a 'Talking Science Basket' will be used.
- The children's attainment is assessed at the end of each unit using Teacher Assessment in Science (TAPS), which focuses on both the key learning and working scientifically. Summative assessments are made three times a year, which are recorded on the Lancashire Tracker.
- Teacher knowledge and understanding of science teaching is improved and developed through training as required. The curriculum leader attends subject leader cluster meetings twice a year.

Impact

- Most of the children will achieve age related expectations in science at the end of their cohort year.
- The children will retain knowledge that is relevant and helps them make sense of the wider world.
- The children will be able to question ideas and reflect on the knowledge they have acquired.

- The children will work collaboratively and practically to investigate and experiment.
- The children will be able to explain the process they have taken and be able to reason scientifically.
- The children will have acquired the school values of respect, trust, compassion, resilience and perseverance.
- All children irrespective of ability, gender develop a love for science.
- There is a love of science throughout the school.
- The curriculum leader has a comprehensive overview of the quality of teaching and learning in science. This is achieved through the yearly monitoring schedule.