Overview of teaching and learning of Science

Intent

Our curriculum is designed to foster an enquiring mind and sense of enjoyment in science and STEM topics in all pupils and develop an understanding of the world around them.

Pupils will develop the use of scientific enquiry skills to solve problems and learn how to carry out practical experiments safely and carefully. Pupils will relate science to everyday life by using everyday materials and situations and create a bank of knowledge by revisiting and extending topics.

Big ideas

Curiosity - A curiosity to understand how things work

Investigation - Use real life experiences to give pupils a practical understanding of scientific concepts

Working Scientifically - Develop a set a of scientific investigation skills

Implementation

- Pupils will ask questions about the world around them to increase their knowledge and understanding
- Key scientific vocabulary will be taught, revisited and extended as pupils progress through the year groups
- Pupils will be taught the skills of scientific enquiry including: observation, seriation, time sequencing, classifying, researching, measuring, recognising and identifying patterns, prediction, fair testing, interpreting and communication
- Investigative work will be balanced between guided practical work and independent investigational work
- Whole school opportunities are provided for sharing and celebrating learning in science, for example, visitors, assemblies and Science Week
- Science in The Early Years Foundation Stage is part of the area of learning entitled 'Understanding of the World'. Activities are both child initiated and adult led. Pupils work inside and outside, recording work in a variety of ways. Activities are planned for first-hand experiences, encouraging exploration, observation, problem solving, prediction, critical thinking, decision making and discussion.
- Years 1 and 2 are assessed through Target Tracker statements.
- Years 3-6 will be assessed by the Rising Stars materials using mid-term and end of topic tests
- Lessons will be supported by resources available on loan from Hadleigh High School

- Children have access to non-fiction books from the School Library
- Subject leaders will conduct lesson dips, learning walks and book scrutinies
- Governors will visit and conduct pupil perception interviews.
- SL to conduct audit of staff CPD and resources.

Impact

Learners will leave with scientific skills necessary to develop their understanding of the world around them. They will have a bank of vocabulary to draw upon and articulate their scientific ideas. They will be able to work safely and collaboratively with their peers on investigations and experiments. They will be able to recognise safety considerations when conducting experiments with increased independence. They will recognise how to set up an investigation to apply these skills in other areas of study particularly within STEM subjects. They will leave with a curiosity for understanding the world around them.