

Our Curriculum

Science

British Values

At Hayfield Cross, these values are regularly promoted through high quality teaching, a rounded programme of assemblies and a positive behaviour policy as well as through SMSC development through relationship and health education. This gives pupils opportunities to develop and demonstrate skills and attitudes that will allow them to participate fully in and contribute positively to life in modern Britain. **Specifically in Science...**

Democracy is taught through pupils working together practically in groups with adults encouraging them to share views and opinions, take turns and listen to instructions from others. There are opportunities to debate issues where students can share their opinions and listen to the views of others.

Respect is encouraged by pupils working as a team, discussing findings and offering support and advice to others.

Tolerance is taught through children having opportunities to learn about scientific discoveries by a diverse range of people from our culture and other cultures. Children are given time to consider conflicts between religious beliefs and scientific understanding with respect and acceptance of people's values.

Liberty is promoted by giving the children opportunities to work independently and make choices when planning and carrying out investigations. Children should debate issues and be respectful when others have different viewpoints.

The Rule of Law is taught through emphasising the importance of following and understanding the rules of experiments for the safety of all. Children should know the consequences when rules are not followed.

BE BRAVE

At Hayfield Cross, we intend to inspire and enable children to become enquiry based learners through our Science curriculum. We do this by teaching scientific skills and topics through asking questions and investigating their answers by carrying out practical enquiries.

Through our 'Be Brave' curriculum we aim to create and deliver inspiring, motivating and engaging learning experiences that spark curiosity and will support children to understand and embed what their learning. Inspired by our school vision (Joshua 1:9) our children are encouraged to persevere, seek challenge and be brave in their Science learning.

Our intention is that children develop their scientific thinking throughout their school life and prior learning is built upon as they move through the school allowing them to make connections. By creating engaging learning experiences that build upon prior understanding, their subject knowledge will be embedded into their long term memory.

All children are encouraged to question the world around them and develop their understanding and use of scientific skills such as observing, planning and experimenting.

Reading, Writing & Maths

Reading:

When learning Science at Hayfield Cross children will be provided a range of high quality texts, linking to a range of science concepts. This will subsequently equip them with a range of vocabulary that reflects their experiences. Children will be given opportunities to use, develop and embed these new words and use them in a range of contexts. Children may be asked to infer basic points with direct reference to events that have happened or predict what might happen using relevant evidence from texts. They might also confirm or modify their own predictions in light of new information from texts. During lessons, children are also often prompted to retrieve, record and present information from non-fiction texts to highlight key information. Reading in a Science lesson will also encourage children to provide justification for their views and begin to challenge alternate points of view.

Writing:

During Science at Hayfield Cross, children will listen and respond appropriately when debating scientific topics using subject specific words appropriately. They will be able to express their own opinions respectfully and make relevant comments or questions during discussions to clarify their understanding. Children will use prior learning and current understanding to develop their ideas, plan written work and present information, editing where appropriate.

Maths:

Many Maths skills are applied during our Science lessons at Hayfield. Children will measure and begin to record data and then ask and answer questions about totaling and comparing data. This will include interpreting and conducting simple pictograms, tally charts, block diagrams and tables. Children will use mathematical vocabulary to describe position, direction and movement and ask and answer simple questions by counting and sorting objects into categories. Children will engage in many practical activities that involve solving problems for lengths and heights, mass, capacity and time.