

Science at Ashfield Valley Primary School



Ashfield Valley Curriculum Drivers



Be articulate: children will be encouraged to formulate a hypothesis about a concept and support it with evidence. They will be encouraged to articulate their thoughts and reasoning with clarity and precision using technical vocabulary. Children will be able to explain concepts and give an explanation of processes.

Be knowledgeable: Children need to know technical, scientific knowledge in order to understand and process abstract concepts. They will be taught the knowledge set out in the National Curriculum and about key scientists and scientific discoveries.

Be able to learn beyond the classroom: Children will have the opportunity to learn from the world around them and to conduct practical work outside when appropriate. Teachers will take opportunities to explain scientific processes when they arise – for example during firelighting.

Be curious: Children will be encouraged to ask questions especially during practical work. They will recognise patterns and ask questions about their observations.

Be Inclusive: A range of scientists are included in the curriculum.

Be Inspired: Children will learn about scientific discoveries and how they have changed the world. They will take inspiration from the world around them and from scientific processes.



Sequencing of Content



Units are sequenced so that knowledge, understanding and skills are built on previous learning. Prior learning is established at the beginning of a unit so that pitch is accurate. Key concepts are interleaved throughout the curriculum so that they are re-visited regularly.



Big Ideas



Underlying key concepts are covered throughout the curriculum such as:

- Change of state
- Forces and magnets
- Electricity
- Light and sound
- Materials
- Living things and their habitats
- Healthy bodies
- Animals including humans
- Rocks and fossilisation
- Earth and space
- Evolution and inheritance



Deepening Concepts



Key concepts are re-visited throughout the curriculum to a deeper level.

Key scientific vocabulary is re-visited throughout the curriculum to embed knowledge and understanding.

Opportunities to develop children's investigation skills in a range of medium is evident throughout the curriculum model: observations, experiments, scientific inquiry and explorations.



Retrieval Practice



Children take part in regular retrieval practice to ensure that key concepts and vocabulary are embedded.

Pupils are given a subject knowledge organiser per Science topic. These allow the children to learn useful key vocabulary and facts

Remembering information and knowledge is celebrated and part of the culture at Ashfield Valley Primary..