Science at Sand Hutton and Warthill

Intent:

In our schools, it is our intention to provide a high quality science education that provides children with the foundations they need to recognise the importance of Science in every aspect of daily life.

Our tailor-made curriculum enables children to become enquiry-led learners who collaborate through researching, investigating and evaluating experiences. It encourages respect for living organisms and for the physical environment. It allows children to develop a range of skills and then build on them.

Teachers will ensure that all children are exposed to high quality teaching and learning experiences. We endeavour to teach imaginatively so children are excited, curious and keen to know more. They will be encouraged to be active learners who ask questions about the world around them and work scientifically to further their conceptual understanding and scientific knowledge. Links will be made to other subjects to help embed and embellish learning.

Our children will learn to use science to predict, explain and analyse. We will encourage child led learning so our children can discover for themselves. The 'awe and wonder' we find in science will be shared in our school community and beyond. Our children will be immersed in key scientific vocabulary, which supports the acquisition of science knowledge and understanding.

All children will be provided with a broad and balanced science curriculum which encourages curiosity, awe and wonder about the world around them.

Implementation:

Sand Hutton and Warthill use a range of resources from which plans for Science are created. Due to the mixed-age nature of our classes, careful consideration is given to our cyclical Long Term Plans such that full coverage of the National Curriculum is provided for all children. Plans are tailor made to suit individual classes and are continuously adapted and modified to suit all needs. Teachers have a strong understanding of the Working Scientifically skills and the progression through them such that this is incorporated into planning also. Regular opportunities for assessment and monitoring also ensures that learning of scientific knowledge and skills is progressive and continuous for all pupils.

Our spiral curriculum offers children the opportunity to learn, revisit, consolidate and build upon such that science learning is embedded in their long term memories. Assessment opportunities are presented throughout the topics covered to allow children to build on their prior learning and ensure planning can be adapted to provide progression for all pupils. Science displays and working walls include key vocabulary for each topic as well as key skills vocabulary. Knowledge organisers are used as an 'aide memoir' for both vocabulary and key facts. These are referred to and revisited to encourage use of key vocabulary in written and verbal responses.

Impact:

Children at our schools will:

- demonstrate a love of learning of science through their enthusiasm and curiosity
- retain knowledge that is pertinent to Science with a real life context.
- be able to question ideas and reflect on knowledge.
- be able to articulate their understanding of scientific concepts and be able to reason scientifically using rich language linked to science.
- work collaboratively and practically to investigate and experiment.