Grange Primary School

Intent, Implementation and Impact Statement – Science

Intent

At Grange Primary School, it is our intention to provide a high-quality science curriculum that provides children with the depth of knowledge they need in order to recognise the importance of science in every aspect of daily life. We want our children to be naturally curious about the world around them and support them in becoming enquiry-based learners.

When planning for the science curriculum, we intend for children to have the opportunity, wherever possible, to learn through varied systematic investigations, leading to them being equipped for life to ask and answer scientific questions about the world around them.

Implementation

As children progress through the year groups, they build on their skills in working scientifically, as well as on their scientific knowledge, as they develop greater independence in planning and carrying out fair and comparative tests to answer a range of scientific questions. The Kent Science scheme of work and the Association for Science Education exemplifications ensures that children have a varied, progressive and well-mapped-out science curriculum that provides the opportunity for progression across the full breadth of the science national curriculum for KS1 and KS2.

Science enquiry skills are embedded throughout each science topic the children study. These topics are revisited and developed throughout their time at our school. Topics such as 'All living things' are taught in both in KS1 and KS2 which allows children to build on their previous knowledge and to build on their enthusiasm.

Science lessons at Grange, involve adapting and extending the science curriculum into a range of different contexts. Where possible, science is linked to class topics. A minimum of 2 hours of science is taught a week (ks2) and 1 hour 30 minutes (ks1) to ensure full coverage of the science national curriculum. We aim for 50% of lessons to be investigation and practical based. Our curriculum will enable our children to become enquiry-based learners through researching, investigating and evaluation experiences.

Science has a strong relationship with maths. All teachers ensure that elements of the maths curriculum are embedded within science lessons where appropriate. The children will get regular opportunities to collect a range of data sources, draw tables and present their findings by plotting graphs.

Throughout their lessons, children will be immersed in key scientific vocabulary, which supports the acquisition of scientific knowledge and skills. There is a clear progression in vocabulary from KS1 to KS2 to ensure the children are being extended and challenged. The children's knowledge of vocabulary is assessed at a beginning and at the end of a topic.

Impact

Formative teacher assessment is completed throughout the year and misconceptions are consolidated accordingly.

In Science, progress is measured through a child's ability to know more, remember more and explain more. This can be measured in numerous ways in our units. The learning environment across the school is consistent with science technical vocabulary displayed, spoken and used by all learners. Children who feel confident in their science knowledge and enquiry skills will be excited about science, show that they are actively curious to learn more and will see the relevance of what they learn in science lessons to real-life situations and also the importance of science in the real world.

Through the delivery of the science curriculum, we provide pupils with a great depth of knowledge and a thorough understanding of science. Teaching sophisticated, scientific vocabulary throughout KS1 and KS2, ensures children in year 6 leave with excellent scientific knowledge and are prepared for secondary education. Pupils leave Grange Primary with a wide range of scientific skills that can be implemented in a range of contexts. The knowledge and skills acquired, help fuel every child's passion for science and continued drive for scientific learning. We strive to ensure that pupils achieve highly, embody our core values and have a deep knowledge and understanding of science.