

DOG KENNEL HILL PRIMARY SCHOOL Science Intent, Implementation and Impact Statement



At Dog Kennel Hill we provide an exciting, practical and balanced science curriculum for all pupils. Our science teaching actively encourages pupils to work independently and with others in practical ways. It develops subject knowledge and understanding, investigative skills and scientific vocabulary.

A high-quality science education provides the foundations for understanding our world. Science continues to change our lives and is vital to our world's future prosperity and sustainability; we believe all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. We aim to achieve that through building key knowledge and concepts; pupils recognising the power of rational explanation and developing a sense of excitement and curiosity in pupils about natural phenomena.

We teach the skills of explanation, prediction and analysis, hoping that the future scientists, doctors, nurses and Nobel Prize winners start here. Wherever you look, whatever you do and wherever you go, science is all around us. At DKH, we develop pupils' understanding of science in a fun and engaging way.

<u>Intent</u>

We believe that it is important for pupils to develop their own understanding and discover things for themselves. It is vital that pupils learn in meaningful ways, for example learning why things work and do not work. Our curriculum inspires pupils' curiosity and allows them to make the necessary connections. We develop their knowledge through hands on activities and practical experiments using the Developing Experts scheme of work.

Our aims are to ensure that all pupils:

- Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

We do this through providing a rich, relevant and engaging curriculum. We ensure that all students are challenged to achieve their potential, work collaboratively and become resilient learners. Within Science, we strive towards growing pupils' confidence, developing their own views and embodying our school and British values.

Implementation

In EYFS, as part of the EYFS Framework, children improve their science through the 'knowledge and understanding of the world' strand of the curriculum.

Learning is planned around the following objectives:

- Comment and question about the world; including where they live
- Talk about some of the things they have observed such as plants, animals, natural and found objects
- Talk about why things happen and how things work
- Develop an understanding of growth, decay and changes over time
- Show care and concern for living things and the environment
- Look closely at similarities, differences, patterns and change



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As Science is a core subject, we ensure its prominence across the school through the delivery of cross-curricular teaching as well as the discrete teaching of subjects and units. The implementation of the science curriculum is supported through the Developing Experts Scheme of learning.

Knowledge organisers reflect the progression of each area of the curriculum. For each topic, these include key vocabulary, prior learning and expected outcomes for the end of the topic. Knowledge Organisers support pupils to integrate new information into existing schemas, thereby aiding retention and retrieval and securing 'sticky knowledge'.

Pupils are provided with a range of enrichment opportunities to raise cultural capital such as workshops, local gardening opportunities, Healthy Eating Week, Science Inventors Week and Science Week.

Impact

We measure the impact through pupils acquiring age-appropriate knowledge and having the skills to develop their own learning. Creative, independent thinking scientists are developed with the motivation, skills to succeed in a changing world.

Through the delivery of our Science curriculum, we provide pupils with:

- Knowledge and understanding about Science
- A wide-range of scientific skills
- Rich Scientific vocabulary
- High science aspirations
- Passion, enthusiasm and enjoyment around Science.

We regularly reflect on the standards across year groups to support and challenge pupils. We celebrate the children's learning and successes. Through tracking standards termly, we use these assessments and feedback to update planning and identify and address barriers. We benchmark against national standards through marking and moderating across the school to ensure consistency. We strive to ensure that pupils achieve highly, embody our core values and have a deep knowledge and understanding of science.