

DOG KENNEL HILL PRIMARY SCHOOL Intent, Implementation and Impact Statement 2024-2025



At Dog Kennel Hill Primary School, we provide an exciting, practical and balanced science curriculum which inspires all pupils to think and act as scientists. Our science teaching actively encourages pupils to work independently and with others in practical ways with the aim to; develop subject knowledge, 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 know all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. We aim to achieve this, through building up key knowledge and concepts enabling our pupils at DKH pupils to recognise the power of rational explanation and develop a sense of excitement and curiosity 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 the students understanding of questions in a fun and engaging way.

<u>Intent</u>

At DKH our curriculum strives to inspire pupils' curiosity, deepen their understanding and help them make meaningful connections with the world around them. We believe it is essential for pupils to learn in purposeful and engaging ways. To support this, we provide rich, creative teaching opportunities in line with the National Curriculum. At DKH we have implemented the Developing Experts scheme of work thus enabling pupils to develop their knowledge and understanding of the importance of practical science as well as through an array of experiences including using equipment, conducting experiments and investigations, building on and explaining concepts and being familiar with scientific terminology.

At DKH, our science teaching is designed to:

- Develop pupils' scientific knowledge and conceptual understanding through the specific disciplines of Biology, Chemistry and Physics.
- Develop pupils' 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.
- Equip pupils 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.

We complete investigations 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.



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- Show care and concern for living things and the environment.
- Look closely at similarities, differences, patterns and change.

As a core subject, science holds a prominent place in our curriculum at DKH. Pupils in Key Stage 1 and Key Stage 2 receive dedicated one-hour weekly science lessons, complemented by STEAM links in cross-curricular teaching. The delivery of our science curriculum is supported by the Developing Experts scheme of learning, ensuring a structured and comprehensive approach.

Our approach to teaching science emphasizes fostering a positive attitude towards the subject while maintaining high expectations to help pupils achieve deeper understanding and mastery. Lessons are strategically organized into well-planned topic blocks that reflect curriculum progression, allowing knowledge to be built gradually and cumulatively. Recall questions are embedded throughout, reinforcing substantive knowledge and increasing the likelihood of success for all pupils.

Each lesson builds on prior knowledge and skills acquired in previous years, offering numerous opportunities for problem-solving, developing curiosity, and applying scientific skills and research to answer questions. This approach consistently nurtures an environment of inquiry and curiosity. Pupils are also guided through their learning journey with the use of knowledge organisers, which outline the lesson sequence, key objectives, visuals, and relevant diagrams for each topic.

At the beginning of each unit, pupils are introduced to key vocabulary and take part in an initial assessment (AFL), allowing teachers to identify and address any conceptual or vocabulary-related misconceptions that may arise before, during or after the delivery of a unit. This ensures and increases pupils' chances in building a strong foundation and deep understanding of the subject matter.

We provide a range of enrichment opportunities to raise cultural capital such as: varied 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:

- Rich Scientific vocabulary
- High science aspirations
- Passion, enthusiasm and enjoyment around Science.

At DKH, we consistently review standards across year groups to both support and challenge pupils, while celebrating their learning and achievements. Regular tracking standards provide teachers to assess the impact of teaching on a weekly basis through embedded Assessment for Learning strategies. This approach allows teachers to assess prior knowledge, inform weekly planning, and identify and address any learning barriers.

Termly summative assessments are conducted, with data uploaded to Target Tracker to monitor progress against National Curriculum objectives. Pupil progress and attainment are benchmarked against national standards through thorough marking and moderation processes across the school, ensuring consistency.



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Throughout each term, we monitor the quality of science teaching and learning through learning walks, pupil discussions (pupil voice), book looks, and pupil progress meetings. The outcomes of these reviews are reflected in teacher appraisals and shared during staff meetings to enhance teaching quality and inform the ongoing refinement of the Science Action Plan. At DKH, we are committed to ensuring that pupils achieve excellence, uphold our core values, and develop a deep understanding of science.