

Intent

Science teaching at Kemsley Primary Academy aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and application of Science, today and for the future.

All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions. Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught are reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.

Knowledge of scientific processes is gained throughout a child's journey through school. Learning in Key Stage Two builds on prior learning in Key Stage One which, in turn, builds on solid foundations gained in the Early Years Foundation Stage. Our Science curriculum uses the National Curriculum to ensure that children gain the knowledge they need to become successful scientists at primary school and beyond, fostering an interest and enthusiasm for the subjects – much needed by today's society.

Implementation

At Kemsley Primary Academy, scientific knowledge and enquiry skills are embedded in each project the children study and knowledge and skills are revisited and developed throughout their time at school. Topics, such as Animals Including Humans, are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.

To facilitate this learning process, teachers plan the following:

- A sequence of learning which builds on prior knowledge, skills and understanding.
- Opportunities to explore, revisit, understand and use technical vocabulary related to Science.
- A well thought out sequence of lessons for each subject that results in progression and depth. In particular children have the opportunity to take part in the five enquiry types and develop the necessary skills to work scientifically during investigations.
- Trips and visiting experts who will enhance the learning experience.
- A means to display and celebrate the pupils' work in their class and finally a way to share their learning with parents and the local community.

Teachers are equipped with specific tools to be able to accurately assess children's knowledge and understanding and their ability to work scientifically.



Impact

Our Science curriculum is high quality, well thought out and is planned to ensure progression. If children are keeping up with the curriculum, they are deemed to be making good progress in line with age related expectations. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes.
- A celebration of learning for each term which demonstrates progression across the school.
- Pupil discussions about their learning - which includes discussion of their thoughts, ideas, processing and evaluations of work.
- Termly assessment against the progression document to assess if the child is working at age related expectations for Science.

Our Science curriculum aims to raise the profile of science within school so that it becomes a core subject at Kemsley.

Science teaching will equip children with a set of enquiry skills that can be utilised in many areas of life.