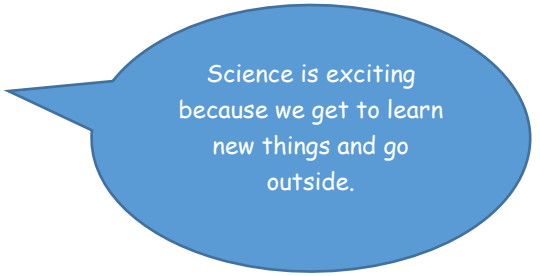
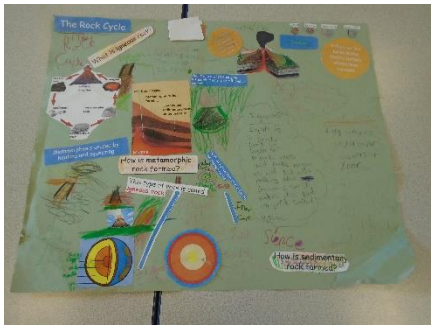
Science Statement

Intent

The provision of Science at Uplands is based on the Hampshire Key Ideas. We follow these Key Ideas as they provide a progressive and engaging curriculum for our children which is provided through enquiry based learning.





Our Science curriculum provides a rich and wide range of experiences inside and outside the classroom, which give children opportunities to develop and deepen their understanding of key scientific ideas. It delivers clear, precise and structured opportunities to learn and understand scientific facts and allows the children to rigorously apply this knowledge to new situations through scientific enquiry. These enquiries challenge all children to find the answer to scientific questions they do not know the answer to and allow them the chance to test their knowledge against the results they find. We actively encourage scientific thinking, particularly when enquiries do not produce the expected or predicted answer. Children will also have the opportunity to apply their scientific knowledge to our school grounds, discovering the environment just outside their classroom and to study this over longer periods of time.

At Uplands, our Science curriculum develops successful learners who enjoy learning, make progress and achieve. We aim to promote our children to become confident individuals who can answer scientific questions using a range of learn knowledge and enquiry skills. Science adheres to our core values and principles of creativity, kindness, respect and resilience. These core values underpin the work done in science by pupils, working creatively and collaboratively; adaptively and resiliently while learning and enquiring with key scientific facts.

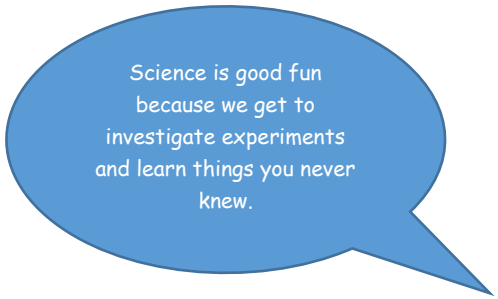
By the time our pupils leave us, we aim to ensure that all pupils:

- Have a secure understanding of key scientific facts as presented within the Hampshire Key Ideas.
- Answer a scientific question or enquiry through planning a fair test and executing with growing degrees of accuracy.
- Can use a range of scientific equipment to help answer a questions, and take measurements with ever increasing accuracy.
- Can question the results of enquiries; evaluate the results of an enquiry and decide on appropriate adaptations; and create their own scientific questions to answer.

Implementation.

At Uplands Primary School, Science is taught in units of work, which cover all appropriate areas of biology, chemistry and physics. Throughout each phase, children will be provided with experience of all areas of science curriculum, covering 'humans and other animals', 'plants', 'adaptation and evolution', 'forces (both contact and non-contact)', 'space (in UKS2)' and 'materials'. Each phase will also provide opportunities to enquire within these areas of learning and over an extended period of time, through a long term study. In our EYFS, children engage with aspects of Science through everyday discovery time activities and gather real life, hands on experiences which set a solid foundation of scientific understanding. They also enquire about scientific concepts linked to their interests such as melting ice, insects & animals and seasonal change. Pupils in KS1 build on the foundation of knowledge and experience and begin to follow the Hampshire Key Ideas. They will also begin to develop more of a structure when following a scientific enquiry; following a specific question, carry out a designed task, observing & recording results and discussing conclusions. As children progress into Lower KS2, they continue to build upon previous knowledge and develop more skills to enquire with. They will experience more varied equipment, develop accuracy (in line with maths skills) in reading scales, increase in independence when completing an enquiry and begin to identify clear relationships between variables. As the children progress into Upper KS2, they will further develop independence, accuracy and complexity in scientific enquiry and further build on their previously learnt key scientific knowledge.

We are proud of the variety of rich opportunities that the children experience through our Science teaching at Uplands. We adopt an enquiry approach to our teaching which allows the children to embed their understanding through real life experiences. We use trips and visitors where appropriate to enrich our Science teaching. Science is an integral part of the curriculum as it contributes to the children's enjoyment of school life, builds logical thinking & problem solving skills and develops their understanding of the wider environment and the impact that humans can have upon it.



Impact

We aim for all pupils to leave Uplands as knowledgeable scientists who are able to think and work scientifically . Evidence of this is shown through our children's problem solving skills, their ability to talk about their science work, their understanding of the environment and the work evident in their science books. Discussion with pupils highlights their enjoyment of the subject and their understanding of scientific concepts taught. Pupils are engaged and interested in their science learning and this is clear through the enthusiasm of all pupils when talking about science and through their learning behaviours in lessons. Children are given the opportunity to learn and challenge themselves within the safe learning environment created by staff.

Evidence of strong outcomes for all can be shown through children's enjoyment of the subject, outcomes evident in books and the data collected at the end of each key stage. Look out for our best bits which are often shared in newsletters and on the school website.