



SCIENCE at Mousehole School

Intent

At Mousehole School we value science as life changing and invaluable for the future prosperity of mankind. We aim to foster a love of science and offer a rich, engaging, cohesive and thorough curriculum. The breadth and value of scientific knowledge, skills and processes are great, and we work hard to impart this in a developmentally appropriate way.

We use a project-based pedagogy that makes links between subjects and reinforces the real-life application of science. We think this a very important aspect of our curriculum: scientific discussion and the presentation of knowledge will be reinforced by English and maths learning and, where possible, links are made to the wider curriculum and the use of scientifically accurate language is reinforced.

Any assessments made, be they formal or informal, should feedback directly into planning and teaching to ensure learning is challenging and meets the needs of all children. We believe that all pupils should be taught essential aspects of science and we also believe that pupils' prior knowledge should be celebrated and built on progressively.

Implementation

A good level of knowledge and understanding is a crucial aspect of teachers being able to deliver science lessons effectively. We have expertise in many areas of the science curriculum in school, with teachers and support staff who have backgrounds in science. We make every effort to ensure this knowledge is shared and that teachers are supported with securing their own knowledge in order to deliver the curriculum content effectively. We also invite and employ experts from outside of the school to support and extend learning experiences where appropriate.

The science curriculum content is prescribed by our curriculum progression documents. Teaching sequences allow for regular opportunities to ask questions, to investigate and debate ideas, to learn specific vocabulary, to work outdoors, to draw conclusions and to find out about famous scientists and their discoveries.

From the foundation stage through to year 6, pupils will be taught a body of key knowledge and concepts detailed by our Science Curriculum Progression documents. Teachers use these progression documents to fit different areas of science to different Real Projects. We use the curriculum overview document to ensure that the breadth and extent of the science curriculum in each key stage has effective coverage.

Teachers plan Science lessons carefully. They use a variety of teaching approaches to secure the best chances of motivating pupils and ensuring their retention of the knowledge. They use planning resources from a variety of sources, for example: The Royal Society of Chemists, A Sense of Place, the Ogden Trust, The Inspire Curriculum, The Hamilton Trust and various other sources.

Impact

The range of science and the innovative ways that the teachers have found to teach the objectives was impressive, the children approached their learning with enthusiasm and excitement – Governor Learning Forum Spring 2019

Children consistently show good engagement in science as evidenced by comments like the one above from a governor forum. Some of our Real Projects have involved working with scientists who are regularly impressed by the depth of knowledge that our pupils possess.

The Science curriculum is evaluated through:

- Whole school learning-scrutiny
- Lesson obs – formal and informal by the head teacher
- External review – PEL, SHIP
- Learning forum meetings which include:
 - Pupils interviews
 - Subject lead scrutiny
 - Action plan review

Historically, our end of Key Stage teacher assessments show excellent attainment in science. We have consistently achieved greater than average percentages of pupils attaining age related expectations..