



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 some elements of a project-based pedagogy that makes links between subjects and reinforces the real-life application of science: 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. Some elements of our science curriculum are taught, reinforced and extended by other curriculum areas. For example identification of tree species in woodland skills, recognising the movement of the tides during beach skills or understanding the human body during Relationships and Sex Education (RSE)

The Mousehole School science curriculum covers the statutory requirements of the National Curriculum which we have adapted and extended to meet the needs of our school and the children there.

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 have drawn on this knowledge to create the Mousehole School science curriculum and 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. Pedagogy and teaching sequences ensure review of previously learnt knowledge as well as opportunities to practice recalling this knowledge. They also allow for regular opportunities to practice the golden threads of scientific skills running through our curriculum for example asking questions, investigating and debating ideas and to analyse data draw conclusions.

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. This knowledge is taught within whole class projects or in stand alone units to ensure appropriate curriculum rigour. 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 and review of specific knowledge
 - 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.