
# Furneux Pelham School Curriculum

## Statement of Intent, Implementation and Impact

Subject: Science Subject Leader: TBA

## Intent

Science is vital to our future prosperity and it is important that our children are engaged with all aspects of science. All pupils at Furneux Pelham School will be provided with the foundations to understand the specific disciplines of biology, chemistry and physics and to develop an understanding of the world around them at an age-appropriate level.

We aim to develop children's natural excitement and curiosity and inspire them to pursue scientific enquiry now and in further life. Throughout the primary years, children should learn to work scientifically by investigating, explaining and analysing phenomena, making predictions, questioning the world around them and solving problems.

Teachers nurture a love for the natural world, excitement for future possibilities in science and provide many opportunities for pupils to grow as scientists.

# Implementation

## Teaching and Learning, Content and Sequence

Science is taught discretely once per week by the class teacher. The National Curriculum statutory requirements are taught on a 2-year rolling program across the mixed age classes.

Teachers are familiar with previous and subsequent year groups' content in order to link learning and build on previous knowledge. The skills of working scientifically skills are also progressive. When planning, teachers refer to the progression document for their current topic and to the ASE PLAN resources to ensure teaching is progressive throughout school. Knowledge organisers are used to support teaching and learning.

Time is taken to identify and teach the specialist vocabulary associated with each topic. This is displayed in the classroom and referred to throughout the unit of learning.

When there is a natural link between a science topic and other curriculum areas, teachers endeavour to work in a cross-curricular manner. A mixture of individual science books and floor books are used to record learning and demonstrate understanding. Learning follows children's lines of inquiry and each lesson includes a working scientifically element to ensure all working scientifically skills are covered over a three-year period. Learners are challenged to make connections within science and to apply their knowledge to real world situations

## Leadership, Assessment and Feedback

Children rate vocabulary knowledge at the beginning and end of a topic. They are given the opportunity to demonstrate prior knowledge and then add to this over time and new learning occurs. Concept cartoons allow for knowledge to be explained at each child's level e.g. deeper understanding can be displayed through scientific reasoning and simple knowledge shown.

# Impact

At Furneux Pelham School, impact in science is measured through low-stakes quizzes, application and recall of vocabulary learning, responses to open ended questions and concept cartoons, oral responses and observations by teacher within class.

As a result of teaching of science at Furneux Pelham school, children:

- acquire appropriate age related knowledge.
- are equipped with investigative and experimenting skills.
- develop their learning skills - concentration, imagination, self-improvement.
- develop curiosity and excitement for the word around them.
- have a rich vocabulary to help them in science and also to access the wider curriculum.
- have high aspirations.
- are inspired to continue science learning or pursue a STEM career.
- develop strong questioning skills in science.
- can make connections throughout the years e.g. fossils in y3 linked to evolution in y6.
- can confidently report and explain outcomes, both written and orally.
- can record findings using a range of graphs and tables.
- can describe methodology accurately to allow for retesting.
- are prepared for science in further education and able to understand the world around them.
- are able to work collaboratively with peers to investigate scientific concepts and questions.
- are aware of the SMSC concerns surrounding science in the modern age.