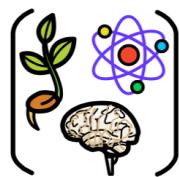


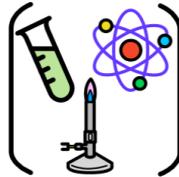
## Science Enrichment across the Brecknock and Torriano Primary Schools Federation.



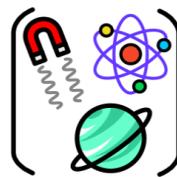
Our children benefit from a wide range of enrichment activities to enhance their science learning. These are always rooted in curriculum objectives and, where possible, highlight careers in STEM subjects or focus on development of scientific skills.



Biology



Chemistry



Physics

### STEAM

Our STEAM projects place science learning at the heart of the children's learning, placing it within a sustainability context (linked to the UN's Sustainable Development Goals) and educating the children to inspire change in the community.

# STEAM

In 2022, the children at Brecknock focused their learning on plants and living things and began to create a new green space in the rooftop garden. The children at Torriano explored their whole school theme of 'The Art of Explanation' by explaining scientific processes in a variety of different scientific units. The learning is always placed within real life contexts, it focuses on developing both knowledge and skills and, importantly, brings in employer partnerships to highlight careers and skills in the world of work. Partnerships last year included engineers from Arup working with EYFS and architecture students from the University of Westminster working with year 5.



## The Scientist in Residence Programme

Developed in conjunction with Dr Lucy Collinson, an electron microscopist at the Francis Crick Institute, and her team, this programme brings a diverse range of real-life scientists into the school to work directly with the children. We create a bespoke workshop, differentiated to all year groups from years 1-6, focusing on developing working scientifically skills. This is embedded within the context of real projects that Dr Lucy's team are working on and contribute data to citizen scientist research.



Programme 1 introduced the children to the world of microscopy through the lab-based activities of sample preparation and data analysis. The children completed a dexterity activity using simple equipment (tweezers and microscopes) to prepare their samples and made careful observations and measurements with increasing accuracy when completing the Etch-A-Cell activity. Dr Lucy also talked about the importance of using oracy skills to present findings to others and the children completed an oracy activity to explain the process they had gone through in the workshop, as part of our whole school theme of the Art of Explanation (2022).

Programme 2 has been launched in Autumn 2022, giving the children the opportunity to meet more of the interdisciplinary team of the Crick - microscopists, chemists and physicists. Children throughout KS1 and 2 visited the STEAM Lab to develop their working scientifically skills of measuring, comparing and classifying - all of the children demonstrated that they are knowledgeable learners and confident communicators. They observed living plankton wriggling around and contributed to real data collection via the citizen scientist Plankton Portal.



## Crick Primary Science



The Francis Crick Institute offer a primary science week to all Camden schools which includes workshops for children from year 1 to year 6. These cover a range of topics from viruses and lasers to chemical properties of materials and skeletons. The Crick scientists visit the children in their own classrooms, with the exception of year 5 who visit the Crick Lab for a 'Discovery Day' which develops their knowledge and understanding of chemistry and electronics. Each child in KS1 and KS2 benefits from this scheme every year.



## ZSL London Zoo Access Scheme

This scheme enables every single child within the schools to visit London Zoo which is situated within Camden. The children all take part in workshops that link to their learning in science. They are able to come face to face with the animals to inspire creative writing and learn directly from the zookeepers about the biology and habitats of the animals.



## British Science Week

British Science Week is held every year in March and highlights the importance of the role of science in our everyday lives. We bring in visitors from STEM careers to talk to the children about their roles and inspire the children to think about potential careers in science. Previous speakers have included Mechanical Engineers from the HS2 project talking about sustainability in their designs and an expert from Bletchley Park discussing the uses of ciphers and codes during World War II. We also celebrate Ada Lovelace Day each year in October, again highlighting careers in STEM projects with a particular focus on women in STEM.

