

Science at Crofton Hammond Infant School



Curriculum/Scheme

In Early Years, the children learn about the world around them, making observations about similarities and differences and changes that are happening/have taken place. Content is cohort specific, following the **curiosity** of the children but always focuses on the environment around them. STEM (Science, Technology, Engineering and Maths) challenges are also introduced to the children and available through continuous provision. These help to build problem solving skills and **resilience**. Children are working towards the ELG 'Understanding the World', which also encompasses elements of Geography.



In KS1 at Crofton Hammond, the children receive all National Curriculum content through the HIAS scheme of learning, where the domains of Science are broken down into topics and coverage balanced between Years 1 and 2. The children are taught substantive (content based) and disciplinary (skills based) knowledge and they undertake investigations in order to practise 'Working Scientifically'. In Year 2, the children also take part in a Longitudinal Study, which allows them to make observations and collect data over time.

Materials: The children learn to identify and name different materials e.g. wood, fabric, plastic and they identify their properties, discussing suitability for purpose.

Animals: The children learn about classification of animals e.g. birds/mammals/fish; prey and predators; carnivore/herbivore/omnivore and explore simple food chains. They look at life expectancy of animals (including humans) and ways to improve survival. They also look at basic life cycles.

Habitats: The children identify and name common habitats, look at variation in living things and simple animal/plant adaptations.

Seasons: The children look at the four seasons in the U.K. and their traits. They also understand how animals and plants have adapted ways of surviving the changing seasons.

Plants: The children learn about plant survival and how new plants are formed. They learn about seeds, bulbs, germination and life cycles of different plants.

Pushes and Pulls: The children learn about push and pull forces, motion and the impact forces can have on objects.

Assessment

The children in Early Years are assessed through observation during continuous and enhanced provision and they use Tapestry to record evidence of children meeting the ELG 'Understanding the World'.

In KS1, the children complete an assessment at the end of each 'domain' to establish whether their substantive knowledge is age related (ARE). 'Working Scientifically' assessments are undertaken through teacher judgements during investigations. These are supported by a formal assessment at the end of Year 2

Hammond Heart – Safeguarding our Children

Our school adheres to the 'Safety in Science 4th Edition 2020' document, which is shared with pupils via the relevant 'Safety Cards'. These are discussed during lessons and displayed on the Hammond Heart wall in each classroom.



Social, Moral, Spiritual and Cultural Development

The children find a sense of enjoyment in learning about the world around them.

They work cooperatively in partners, small groups and as a class to complete scientific investigations and this improves their ability to recognise, and **respect**, the things we share in common across cultural, religious, ethnic and socio-economic communities



Home Links

Each Scientific domain has an accompanying 'Knowledge Organiser', which is posted on the SWAY newsletter at the beginning of the learning journey. Hard copies can be requested from your child's teacher. Knowledge Organisers' outline the key Substantive knowledge for the domain and provide subject specific vocabulary. These can be used by parents to support/consolidate learning at home.



Linked P4C Concepts

Examples include; fair, same/different, change, survival, life, **curiosity**, **respect**, **resilience**.

