

SCIENCE

Intent

At Upton Westlea, we intend for science to be an opportunity for pupils to build on their knowledge and understanding of the world around and develop their natural curiosity and skills of enquiry. Throughout the school children will be developing the scientific enquiry skills of observing; pattern seeking; comparative and fair testing; identifying and classifying; and research. There is a focus on the skills of investigation and children use these skills to add to their knowledge of how the world works. This will lead to children learning to work as scientists, planning and undertaking scientific investigations. It is our aim to promote positive attitudes to the learning of science and its function in the wider world, today and for the future.

Implementation

The national curriculum is set out year-by-year for key stages 1 and 2. Every year group has its own programme of study to follow with regards to knowledge based content, covering the three areas of science, biology, chemistry and physics as you progress through the key stages.

At KS1 and KS2 Science is taught both as a discrete subject and as one linked with other areas of the curriculum through a theme. The aim of linking science to a theme is to put it into context and make it more meaningful by doing so. The programmes of study describe a sequence of knowledge and concepts. While it is important that pupils make progress, it is also vitally important that they develop secure understanding of each key block of knowledge and concepts in order to progress to the next stage.

Working scientifically is the name given to the skills used in scientific enquiry. This is clearly detailed and well emphasised for KS1 & KS2. The curriculum sets these skills out in a progressive way, to be taught throughout the key stages, growing more complex through the year groups.

Pupils are given the opportunity to use systematic enquiry communicating their findings in a variety of ways. Emphasis is placed on health and safety in science where children will be made aware of relevant points regarding health and safety when undertaking work or practical activities.

Appropriate practical equipment is available and should be used whenever possible, and resources are held centrally for all classes to use as appropriate. Schemes of work and website subscriptions are also available to help teachers with planning and delivering lessons to engage and inspire. Wherever applicable, children will be given opportunity use IT to support their work in science.

Activities are planned in such a way as to encourage full and active participation by all children irrespective of ability or barriers to learning, with our themes using a variety of starting points which appeal equally to all pupils.

Early Years

The early stages in the development of investigative skills are introduced in the Foundation Stage. Science is covered here as part of Knowledge and Understanding of the World.

Impact

When leaving Upton Westlea our pupils should be equipped with scientific skills to enable them to gain an understanding of scientific processes and the skills of investigation. They should have positive attitudes towards science, built upon children's natural curiosity to problem solve. The children should be open-minded, and able to persevere. As they progress through the schools, skills should be built upon and misconceptions addressed as soon as possible to avoid any further impact on understanding.