Science Vision and Principles

Curriculum

At Whytrig, we aim to develop the pupils' interest in the Sciences and give them a sound understanding of the world around them. They explore the various fields of Science, such as Physics, Chemistry, Biology, Earth Science and Astronomy.

In Key stage 2, Science is classroom based. Science in Years 7 and 8 emphasises the use of scientific apparatus and method in a laboratory situation. All classes in Key Stage 3 are taught by a Science specialist.

Throughout the school, as much of the teaching as possible is practical, to enable the pupils to acquire the processes, skills and knowledge that provide a solid foundation for future study, including preparation for Key Stage 2 and Key Stage 3 tests. The emphasis is on increasing pupils' investigative skills. Material is selected to increase the pupils' powers of observation and measurement so as to develop their ability to record observations and measurements in a variety of ways and explain their findings scientifically. Relevant aspects of Human Reproduction and Sex Education are taught in Years 5 and 7 as a natural progression from studies of "Living things and life processes".

There is close liaison within the partnership with both first and high schools to ensure that all schools adopt an agreed common core of knowledge and skills to enable a smooth transition to middle and high school levels. This common core covers the requirements of National Curriculum at Key Stage 2 and Key Stage 3.

Elements of the National Curriculum are enhanced by visits. For example, we visit the Nissan factory in Sunderland to develop pupils' understanding of future technologies and sustainability.

Our Science Lab was refitted, to include working ‘pods’ for 4 – 6 pupils, instead of benches, providing excellent facilities for our students.

In Year 5 your child will learn about:

- Solids, Liquids and Gases.
- Energy – Heat, Sound and Light.
- Electrical Circuits.
- Living Things and their Environment.

Science topics covered in IPC:

- Keeping Healthy.
- Earth, Sun and Moon.

In Year 6 your child will learn about:

- Materials and their Properties.
- Forces and their Effects.
- Micro-organisms.
- Earth Science.

In Year 7 your child will learn about:

- Electrical Energy.
- Sport and Forces.
- Human Biology-Cells and Reproduction.
- Materials and their Properties.

In Year 8 your child will learn about:

- Energy Transfer.
- Atoms, Elements, Compounds and Mixtures.
- Human Biology-how the body uses food.
- Ecology.