



Purpose:

Science gives pupils the opportunity to study things and try to figure out patterns or rules to explain how they work. Across all year groups scientific knowledge and skills should be learned by working scientifically.* In Science they might study things like the ocean and its creatures, volcanoes, or machines.

Core Learning*

- To work scientifically
- To understand and investigate the living world
- To understand and investigate materials
- To understand and investigate physical processes such as light, the solar system, forces and electrical circuits.

Characteristics of a Scientist*:

- The ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings.
- Confidence and competence in the full range of practical skills, taking the initiative in, for example, planning and carrying out scientific investigations.
- Excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations, solving challenging problems and reporting scientific findings.
- High levels of originality, imagination or innovation in the application of skills.
- The ability to undertake practical work in a variety of contexts, including fieldwork.
- A passion for science and its application in past, present and future technologies.

Using and Applying English and Maths within Science:

English

- ⤴ Demonstration of skills taught within focussed English session;
- ⤴ Debates, discussion of theories and hypothesis, written reports and presentation of results.

Maths:

- ⤴ Demonstration of skills taught within focussed Maths sessions;
- ⤴ Accurate measurements and use of different measures. Analysing results.
- ⤴ Data handling eg. How many different species are found within a set area of woodland?

Inclusion:

Teachers should set high expectations for every pupil. They should plan stretching work for pupils whose attainment is significantly above the expected standard. They have an even greater obligation to plan lessons for pupils who have low levels of prior attainment or come from disadvantaged backgrounds. Teachers must also take into account the needs of pupils whose first language is not English.