



Intent

Our science provision aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of Science, today and for the future.

Curriculum

Knowledge/Skill development:

- Scientific enquiry
- Biology
- Physics
- Chemistry

Sequencing of content:

Science is taught in half-termly topics where the knowledge and concepts of biology, chemistry and physics are taught progressively alongside a progression in the skills of working scientifically. Each science topic is not covered in every year but it does fit into an overall sequence of learning.

An example of the progression for the topic of forces is in year 2; they learn how forces can change the shape of materials, in year 3 they learn about friction being a force between two surfaces and in year 5 they learn about drag forces.

Implementation

How is it taught?

Children have weekly lessons in Science throughout Key Stage 1 and 2, using various programmes of study and resources. In Early years, science is taught through the children learning about the world around them in their learning through play.

- Reading for knowledge is key.
- Teachers have an overview of which Science objectives they should be covering every half term. This overview shows progression through the year groups.
- Scientific vocabulary is taught and shared/ displayed in each classroom for pupils to access and use.
- Pupils may have access to knowledge organisers with the scientific language that they need to use during lessons.
- Working scientifically objectives are explicitly taught during each unit.
- Pupils are given a wide range of trips and experiences linked to their topics.

Support:

Children are supported through pre-teaching of certain concepts and vocabulary.

Work is differentiated for example through scaffolding where appropriate.

The work is recorded in different ways to support the child.

Impact

How do we know our children have learnt more and remembered more?

Ongoing assessment within lessons.

Responses to key questions (scientific enquiry).

Retrieval practice: Children take part in regular mini-quizzes and retrieval activities to strengthen their memory.

Teacher assessment related to core content/ knowledge gained at the end of each unit.

Formal end of unit assessments.

What are we aiming for?

We aim to ensure children not only acquire the appropriate age related knowledge linked to the science curriculum, but also skills which equip them to progress from their starting points, and within their everyday lives.

All children will have:

A wider variety of skills linked to both scientific knowledge and understanding, and scientific enquiry/ investigative skills.

A richer vocabulary which will enable to articulate their understanding of taught concepts.

High aspirations, which will see them through to further study, work and a successful adult life.