

Science at Yarm Primary

At Yarm Primary, our intent is to provide children with a broad and balanced curriculum, which builds on their needs and prepares them for the future. We use a project-based approach to provide an engaging and purposeful context for learning where pupils are encouraged to apply the skills and knowledge in a range of subjects. We place emphasis on mastering key skills to provide a solid foundation for lifelong learning.

Within the National Curriculum:

Pupils should be given opportunities to:

develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.

develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them

are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Pupils should be taught:

In EYFS, understanding of the world involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment. Within the Early Years environment, the children have access to sand, water, paint and small play area, where they can investigate properties of materials both independently and through teacher led activities.

Throughout Key Stage 1, children explore the topics of: Plants, Animals, including humans, Everyday Materials, Seasonal Changes and Living things and their Habitats. Within Key Stage 2 children are expected to develop their scientific understanding of the topics covered from Key Stage 1 as well as exploring new topics such as Rocks, Light, Forces and Magnets, States of matter, Sound, Electricity, Properties and changes of materials, Earth and Space and Evolution and Inheritance.

Working scientifically is a key part of Science that is embedded across all topic areas. This provides the opportunity for pupils to observe over time, pattern seek, identify, classify and group, comparative and fair test and research using secondary sources. Pupils should also seek answers to questions through collecting, analysing and presenting data.

To implement the offer children are supported in developing their skills through discrete topic links or more explicit sequences of work. Sequences are designed to develop knowledge and understanding of all pupils and allow for them to progress to the next stage. Pupils should be able to describe associated processes and key characteristics and common language, but they should also be familiar with and use, technical terminology accurately and precisely.

Annually British Science Week is a way to raise the profile of STEM within school, with all year groups taking part. Year groups develop learning opportunities around a scientific topic, with some driving the learning across the half term through the development of enquiry questions. Examples include:

Is there life on Mars?

Harry Potter – magician or scientist?

Is electricity finite?

To secure the offer we feel our children deserve, our most recent internal enquiry has identified a number of actions/questions which we will work on as short term actions to develop the area further:

- Review of resources
- Development of STEM links.
- Review of scientific enquiry strand.

