
Science

Woodside Academy

Intent

Woodside Academy has made science a key subject in our curriculum. This means that this is taught weekly by class teachers. Our intention for science is to ensure that there is a natural progression in their learning through the topics they are taught. We follow the 2014 National Curriculum to ensure that each year they will be taught new skills and build on their previous scientific knowledge. We will also be including an Eco topic for each year group to follow to extend the children's understanding of the world around them. By the end of their primary education we aim to ensure that all children can:

- 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

Implementation

At Woodside Academy our vision is to positively teach science and inspire children; to ignite their curiosity and encourage them to ask questions about the world around them. Science will be taught in a range of ways to reinforce an expectation that all children are capable for achieving high standards and are in line with the new lines of enquiry in the National Curriculum. We will be teaching children to:

- Observe over time
 - Pattern seek
 - Identify, classify and group
 - Use comparative and fair testing
 - Research using secondary sources.
- By using these lines of enquiry we want to ensure that we apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently and to continue to ask questions and be curious about the world we live in.
 - Science teaching begins in EYFS with the introduction of questioning and play. Science is taught weekly by all year groups and will follow the 2014 National Curriculum with the added extra of an Eco topic for environmental studies. Throughout the years children will follow a natural progression by building on their scientific knowledge. A scheme of work with the modifications of using Explorify to aid greater depth knowledge and questioning.
 - Our science curriculum will develop transferable skills such as communication, questioning, observations, team work and pattern seeking. It can lead to the development of skills in a range of subjects such as Computing, D&T and maths. To deepen their understanding we will show our science work in our topic books by using:
 - Mind maps
 - Planning our own investigations
 - Researching using secondary sources e.g. the Internet or Science books or interviewing people
 - Annotating drawings
 - Using our school grounds for research and also for long term projects
 - Using classroom displays showing questions and key vocabulary

- All of our lessons will be adhering to our new science principles. These have been discussed and agreed by staff and the children are aware of these principles. Please find attached a copy of the principles for Key Stage 1 and Key Stage 2.
- At the end of their primary education we hope to have educated them well enough so that they are able to make informed decisions about the world around them e.g. their health, how their body works, how some of the world around them develops and to be able to seize scientific opportunities around them.
- Science is celebrated monthly by using 'Scientist of the month' who are picked by the Science Ambassadors.
- Children are offered a wide range of extra-curricular activities, visits, trips and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge being taught in class. These include a weekly science club for the class Science Ambassador, residential trip for Year 4 focusing on environmental studies and the wildlife around them and our yearly science week. We also ensure that teachers and the subject leader works closely with the Eco leader to ensure there are plenty of cross-curricular activities. Woodside also actively encourage parents and families to be involved in some of these activities or projects.
- Regular events, such as Science Week or project days, such as Nature Day, allow all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve families and the wider community.

Impact

The science curriculum is evaluated through

- Analysis of science data (every half term)
- Teacher assessments

Summary