

St, Joseph's Catholic Primary School

Science Curriculum Statement



INTENT

Our intent is to develop pupils' interest and enjoyment of science. We aim to encourage children's natural curiosity about the world around them through the science curriculum. This will help to instil a positive attitude towards science in pupils.

In our study of Science our children will:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop an 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
- be equipped with the working scientific skills required to understand the uses and implications of science today and for the future
- be inspired and excited through a practical and varied curriculum.
- have opportunities to explore their outdoor environment and locality, thus further developing their scientific enquiry and investigative skills.
- to focus on the work of great scientists and to use and apply a growing bank of scientific vocabulary.
- We intend to provide all children regardless of ethnic origin, gender, class, aptitude or disability, with a broad and balanced science curriculum.

IMPLEMENTATION

Science is taught in block units across both Key Stages, in line with the Science Programmes of Study from the National Curriculum 2014, 'and, 'Understanding of the World' in the Early Years Foundation Stage, delivering a clear and comprehensive Science Curriculum. Each unit includes a strong focus on the skills of scientific enquiry through an investigative and exploratory approach that makes learning memorable. Teachers aim to include the scientific methods, processes and skills of 'Working Scientifically' in their lesson planning.

Science at St Joseph' s is taught weekly, as a stand-alone subject but suitable links to other topics will be made where appropriate throughout the academic year. Links to English and Maths are made where appropriate.

The Curriculum coverage of each theme allows for progress in skills and knowledge from year to year. For example, in the theme of Materials in KS1, children are introduced to the idea of different materials, and the properties that they have. In Y3 they look at properties relating to rocks and their uses. Later they are introduced to the idea of solids, liquids and gases and the properties of each. Reversible changes are also introduced, with changes of state as the main example. Later in Key Stage Two, chemical changes are introduced including non-reversible changes such as burning and rusting.

Children have access to key scientific language and meanings in order to understand and readily use them in their written, mathematical and verbal communication.

Teachers plan wherever possible for practical investigative opportunities within Science lessons. Use of the school grounds and the local environment enhances scientific learning. Regular opportunities for first hand observations increase the children's enjoyment and their understanding of scientific concepts.

IMPACT

The impact and measure of this is to ensure children acquire the appropriate age related knowledge linked to the science curriculum, and also the key skills which equip them to progress from their starting points, and within their everyday lives.

The children will have a wider variety of skills linked to both scientific knowledge and understanding, and scientific investigative skills.

They will gain a rich scientific vocabulary which will enable them to articulate their understanding of taught concepts.

As children progress throughout the school, they develop a deep knowledge, understanding and appreciation of the local area and its place within the wider scientific context.

Children will be able to question ideas and reflect on knowledge.

Children will work collaboratively and practically to investigate, observe and experiment.

Children will be able to explain the process they have taken and be able to talk about their findings using a growing scientific vocabulary.