



Subject: Science

Spiritual

- Science is using evidence to make sense of the natural world. It supports spiritual development by providing opportunities for children to spend time reflecting the relationship between how the physical world behaves and the interdependence of all living things. Through making new discoveries we increase our sense of awe and wonder about the world's complexities and elegance. For scientists, this is a spiritual experience and drives us onwards in our life-long search for understanding.

Moral

- Science supports moral development by demonstrating to children that different opinions and theories need to be both respected and valued. Moral and ethical issues include certain medical treatments, the impact of humans on the environment, or how government funding is allocated to scientific projects. As teachers, we encourage pupils to be both open minded (generating a hypothesis) and critical (demanding evidence) and to use their understanding of the world around them in a positive manner.

Social

- Through science, children are exposed to the power of collaborative working, which has led to amazing and life changing breakthroughs in medicine. It has a major impact on the quality of our lives as pupils consider the social impact (both positive and negative) of science and technology. In addition, sharing ideas, data, and results (for further testing and development by others) is a key principle of the scientific method. We encourage pupils to work together on scientific investigations and to share results (to improve reliability). In the science lesson, this allows for inclusion and for maximum contributions to their ideas in order to further develop their thinking and understanding.

Cultural

- Science has played a key part in developing modern culture as it explores exactly how scientists from a range of cultures have had a significant impact globally. It

also helps children understand the importance of science to the economy and culture of the UK and enables children to appreciate this within their own lives. In Science lessons, we often research and celebrate developments that take place in many different cultures, both past and present. We explore how scientific discoveries have shaped the beliefs, cultures and politics of the modern world and how they will continue to do so.

Specific examples of Spiritual, Moral Social and Cultural Develop in Science include:

- **Studying and discussing the impact on human beings on the environment, the problems created by industry and possible solutions.** For our recent science week, as a whole school we explored how humans are impacting our oceans with the plastic crisis. We encouraged children to consider the implications our actions have whilst reinforcing the significance that looking after our planet has on our future to inspire future scientists to really make a difference in the world.
- **Investigating the impact of significant scientists from around the world.** In Year 5, we contrasted and compared the impact scientists such as Isaac Newton had on forces and the impact Galileo Galilei vs Nicolaus Copernicus had on our understanding of our entire universe.
- **Studying the scientific method and how scientists collaborate to share and test ideas.** Within school, together we use a broad variety of enquiry methods, such as observing over time or pattern seeking, to deepen our working scientifically skills and feel that by increasing our level of communication, we can increase our accuracy and outcome.