

Science

Science enables us to understand the world around us and explain the reasons behind our daily functioning, ranging from understanding our own body to more complex technological systems such as microscopy. At Thames Valley School, students are taught essential knowledge and skills that aids them to build upon and extend their understanding, studying new scientific concepts and pursuing new interests.



The curriculum aims to:

- Develop their understanding of scientific thinking and connections between different scientific concepts;
- Build their knowledge of scientific vocabulary and symbols allowing them to better understand the world around them scientifically and equip them for being able to better communicate their understanding;
- Nurture their scientific interests and explore the world around them through scientific enquiry, applying observational, practical, modelling and problem-solving skills. This will allow students to develop an understanding of the nature, processes and methods of science, whilst being encouraged to apply their skills to everyday life;
- Develop an ability to analyse and evaluate claims and situations critically, both qualitatively and quantitatively. This includes being able to evaluate risks and critically evaluate the uses and implications of science in today's world and the future and communicate their thoughts effectively. This will help students develop their understanding of causes and effects both in scientific and non-scientific situations.

Each year, students are taught Physics, Biology and Chemistry, increasing their familiarity with each discipline of science, whilst exploring a range of different topics. During each term, there will also be a focus on scientific protocol, with an emphasis on the key requirements when working scientifically.

We aim for all students to undertake the Combined Trilogy GCSE as students progress through Key Stage 4, however, in some cases, students may work towards an Entry Level Certificate in Science with discussion with their parents/carers if this is best suited to their individual needs and goals.