Science

Curriculum intent:

To provide a high-quality science education in accordance with the Catholic ethos and charisms of the school. We believe that science provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity; all pupils are taught essential aspects of the knowledge, methods, processes and uses of science to enrich their lives and understand the world around them. Through building up a body of key knowledge and concepts, pupils will be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They will be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. We will use a wide range of methods to assess pupils learning so that we can best support pupils in their journey.

Year 11

	Content	Concepts and Skills
TERM 1	**Biology – Homeostasis, Inheritance, variation and evolution.** **Chemistry – Chemical analysis, The earth's atmosphere, The earth's resources** **Physics – Electricity, simple circuits and Electromagnetism**	**Biology: Maths – sampling techniques, calculating percentages, Estimations, Area** **Chemistry: Maths – pie charts, Percentages** **Physics: Maths – Rearranging equations**. Using models to describe phenomenon
TERM 2	**Biology** – Biodiversity **Chemistry – Chemical analysis and Chemistry of the atmosphere** **Physics - Atomic model. Paper 1 and 2 revision**	**Biology: Maths – sampling techniques, calculating percentages, Estimations, Area** **Chemistry: Maths – pie charts, Percentages. Analyticial tests** **Physics: Maths – Rearranging equations. Using models to describe phenomenon**. Interpreting graphs.
TERM 3	**Biology** – Revision of Paper 1 & 2 and Required Practicals **Chemistry** – Revision of Paper 1 & 2 and Required Practicals **Physics** - Revision of Paper 1 & 2 and Required Practicals	Examination technique and preparation