Science

Archdiocese of Liverpool

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 7

	Content	Concepts and Skills
TERM 1	**Enquiry Processes** **Chemistry –** Mixing, dissolving and separating **Biology** – Eating, drinking and breathing	**Enquiry processes:** asking scientific questions, planning investigations, drawing tables and graphs, analysing patterns in data, evaluating data **Mixing, dissolving and separating –** Safety, practical skills, modelling states of matter, separation techniques. **Eating, drinking and breathing** – Body energy needs, digestive system, modelling the breathing system
TERM 2	**Physics –** Forces and their effects **Chemistry** – Elements, compounds and their reactions	**Forces and their effects –** Types of forces, friction, moments, using simple equations **Elements, compounds and their reactions –** Modelling, elements, compounds and mixtures, metals and reactivity, investigating chemical reactions, practical skills, graph skills
TERM 3	**Biology –** Cells **Physics –** Energy transfers and sound	**Cells – microscope skills, specialised cells, reproduction, graph skills, data analysis.** **Energy transfers and sound – using equations, percentages, efficiency, cost of energy.**