



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 8

	Content	Concepts and Skills
TERM 1	<p>Enquiry Processes</p> <p>Chemistry – Physical changes</p> <p>Physics – Exploring contact and non- contact forces</p>	<p>Enquiry Processes: Maths– plotting graphs, Rearranging equations, Analysing and evaluating Understanding bias</p> <p>Physical changes – Particles, diffusion, density, rearranging equations</p> <p>Exploring contact and non-contact forces – using simple equations, static electricity, pressure.</p>
TERM 2	<p>Biology – Getting the energy your body needs</p> <p>Chemistry – Chemical changes</p>	<p>Getting the energy your body needs – Skeleton, muscles, respiration, word equations.</p> <p>Chemical changes – acids and alkalis, fuels, combustion, plotting graphs and lines of best fit</p>
TERM 3	<p>Physics – Magnetism and electricity</p> <p>Biology – Looking at plants and ecosystems</p> <p>Chemistry – Our Earth</p>	<p>Magnetism and electricity – modelling scientific concepts, how motors work, electricity</p> <p>Looking at plants and ecosystems: Investigating how plants harness the energy from the sun to produce their own food and how this food is utilised by animals for respiration. Understanding the impact of changes in the environment.</p> <p>Chemistry: learn about the rock cycle. Study data and form conclusions</p>

