



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 9

TERM 1

Content

Biology – Variation for Survival
Chemistry – Motion on Earth and Space
Physics – Obtaining Useful Materials

Concepts and Skills

Biology: the variation between and within species. Maths – converting units, standard form, significant figures and probability
Chemistry: how metals are obtained from the Earth. Maths– common multiples multiplication & division, interpreting chemical formulae, percentages balancing equations
Physics: develop ideas about force and motion. Maths – drawing graphs, changing units, multiplication and division

TERM 2

Biology – Our Health and the Effect of Drugs
Physics – Waves and Energy Transfer

Biology: learn about drugs disease and how our body is affected by each. Maths – graph interpretation
Physics: compare the properties of water and light waves and how they transfer energy. Maths skills – converting units and multiplication

TERM 3

Biology – Bioenergetics
Chemistry – Chemistry of Atmosphere

Biology: Bioenergetics is the study of energy flow and transformation in living organisms, focusing on how energy is produced, stored, and utilized for biological processes. Practical skills - measuring photosynthesis.
Chemistry: learn how the Earth's atmosphere has evolved and how humans are accelerating change.
Maths – percentages and graphs.

