



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

TERM 1

Content

Enquiry Processes

Introduction unit

Chemistry – Particle Theory and separation techniques

Concepts and Skills

Enquiry processes:

scientific questions, planning investigations, drawing tables and graphs, analysing patterns in data, evaluating data.

Safety, practical skills.

Particle theory and separation techniques – modelling states of matter, separation techniques.

TERM 2

Physics – Forces, motion and energy

Biology – Cells

Chemistry – Acids and Alkalies

Forces, motion and energy – Types of forces, friction, moments, using simple equations.

Cells – microscope skills, specialised cells, reproduction, plants and pollination.

Acids and Alkalies – pH scale, making salts and neutralisation.

TERM 3

Biology – Eating, drinking and breathing

Physics – Electricity, magnetism and light

Key skills in science

Eating, drinking and breathing – Body energy needs, digestive system, modelling the breathing system.

Electricity, magnetism and light Circuits, how electricity works, magnets, reflection, refraction and lenses.

Key skills – Review of variables, method writing, drawing graphs, conclusions and analysing data.

