

Science

A high-quality science education 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, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Working Scientifically	Year 7			Year 8			Year 9			Year 10			Year 11		
Scientific attitudes															
Experimental skills and investigations															
Analysis and evaluation															
Measurement															
Subject Content: Biology	Year 7			Year 8			Year 9			Year 10			Year 11		
Structure and function of living organisms: Cells and organisation															
The skeletal and muscular systems															
Nutrition and digestion															
Gas exchange systems															
Reproduction															
Health															
Material Cycles & Energy: Photosynthesis															
Cellular respiration															
Interactions and interdependencies: Relationships in an ecosystem															

Genetics & Evolution: Inheritance, Chromosomes, DNA & Genes																
Subject Content: Chemistry	Year 7			Year 8			Year 9			Year 10			Year 11			
	The particulate nature of matter															
	Atoms, elements and compounds															
	Pure and impure substances															
	Chemical reactions															
	Energetics															
	The Periodic Table															
	Materials															
	Earth and atmosphere															
	Subject Content: Physics	Year 7			Year 8			Year 9			Year 10			Year 11		
Energy: Calculation of fuel uses and costs in the domestic context																
Energy changes and transfers																
Changes in systems																
Motion and forces: Describing Motion																
Forces																
Pressure in fluids																

Balanced forces														
Forces and motion														
Waves: Observed Waves														
Sound waves														
Energy and waves														
Light waves														
Electricity and electromagnetism: Current Electricity														
Static electricity														
Magnetism														
Matter: Physical Changes														
Particle model														
Energy in matter														
Space physics														

Above is an indication of the skills and knowledge continued in the GCSE Specification (Combined)