

KS4 – Year 10 – Combined Science GCSE

Term	Topic Titles	Brief Overview
1	B1 - Cell biology	Students explore how structural differences between types of cells enables them to perform specific functions within the organism.
	C1 - Atomic structure and periodic table	Students learn about the periodic table and its arrangement of known elements and also the historical development of the periodic table and models of atomic structure.
	P1 - Energy	Students learn about energy changes in systems and how to calculate energy in stores and during transfers.
	B2 - Organisation	Students learn about the human digestive system which provides the body with nutrients and the respiratory system that provides it with oxygen and removes carbon dioxide.
	C2 - Bonding, structure and the properties of matter	Students use theories of structure and bonding to explain the chemical and physical properties of materials.
2	P2 - Electricity	Students learn about direct current circuits, mains electricity, and its dangers and uses.
	C4 - Chemical changes	Students learn about reactions of acids and bases, the reactivity series of metals, and the processes of oxidation, reduction, and electrolysis.
3	P3 - Particle model of matter	Students learn how we use the particle model of matter to explain properties of solids, liquids, and gases, and the phenomenon of pressure.
	C3 - Quantitative chemistry	Students learn calculations involving the masses, moles, and concentrations of substances, as well as the principles of conservation of mass and balanced chemical equations.