

Year 11 Combined Science Curriculum Map

Month	Unit Title	Description
September	P5 Forces and motion	Pupils recall what they learnt about forces and motion in year 9. They then go on to learn about Newton's three laws of motion, including investigating the relationship between force, mass and acceleration. Finally, pupils learn about momentum.
September	C6 Rates of reaction	Pupils learn about different factors that affect the rate of a reaction and how rates of reaction can be measured and represented graphically. They also learn about equilibria and how the position of an equilibrium may be shifted.
October	C8 Chemical analysis	Pupils study techniques to separate mixtures, including chromatography. Finally, pupils learn about formulations and tests for different gases.
November	P2 Electricity	Pupils recall their learning about electricity from year 10, before going on to study differences between series and parallel circuits, and new components such as LDRs and thermistors. Finally they learn about alternating and direct current and the National Grid.
December	C5 Energy changes	Pupils learn about the differences between exothermic and endothermic reactions.
January	C4 Chemical changes	Pupils study a range of chemical reactions including oxidation and reduction reactions, and electrolysis. They also learn about strong and weak acids.
February	P6 Waves	Pupils study the differences between transverse and longitudinal waves, and the wave equation. They go on to study the electromagnetic spectrum. Pupils then learn about refraction and reflection of waves. Finally they learn about the dangers of exposure to radiation and the heating effect of infrared.
March	P7 Magnetism	Pupils learn about magnetic materials, magnetic fields and motors.
March	C3 Quantitative chemistry	Pupils learn about the conservation of mass in chemical reactions, and how to calculate the relative formula mass of a compound. Finally pupils learn about moles and how they are used in Chemistry.
April onwards	REVISION	