

Year 11 Curriculum Plan 2024 - 2025

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
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Topics	Nervous and hormonal coordination			Chemical calculations		Electrolysis		Forces in Balance		Forces in Motion	
Autumn	Structure of the nervous system, Nerve Pathways	Reflex responses, The eye	Endocrine system, Control of blood Glucose level, Diabetes reproductive hormones, contraceptions and IVF	Relative Atomic mass & Formula mass, Theoretical, actual and percentage yield	Atom economy, calculating concentration of a solution. Balancing equations	Electrolysis equations, movement of ions and the prediction of products	Electrolysis of Aluminium and Brine	Vector and Scalar. Forces between objects and Resultant forces	Moments, Levers and Gears. Equilibrium	Speed, Distance Time and graphs. Velocity, Acceleration	Mass and Weight. Stopping distances

Topics	Oil, The atmosphere and Earth's resources			Waves		Electromagnetism and Magnetic fields		Genetics, Variation and evolution				
Spring	Crude oil & its composition, fractional distillation, cracking, Combustion	The early atmosphere, formation of the atmosphere, greenhouse effect	Uses of the Earth's resources, Potable water, Sewage.	Life cycle assessments, reduce, reuse, recycle	Properties of Waves. Measuring the speed of waves	EM Spectrum, Frequencies, Uses and Dangers	Electromagnetism and Magnetic fields	AC/DC, Cables and Plugs, Electrical appliances, Supply & National Grid	Sexual and Asexual reproduction, DNA structure	Genes and chromosomes, punnett Squares and family trees	Variation - genetic/environmental, Selective breeding, GM Crops	The theory of Evolution, fossils, extinction events

Topics	Chemical analysis		Biodiversity and Human Impact	Radioactivity	Chemistry revision		Biology revision		Physics Revision	
Summer	Pure substances, melting point. Chromatography and Rf Values	Gas tests, H, O, Cl, CO ₂	Biodiversity, Pollution, Global Warming, Deforestation and the Greenhouse effect	Atoms, Discovery of Atomic Structure, Alpha, Beta and Gamma Radiation and radioactive decay, Half life, Uses, Fission, Fusion and Nuclear issues						

RD HOMESCHOOL