

Year 10	Autumn Term	Spring Term	Summer Term
Topics Studied in AQA Trilogy Combined Science	Biology: Bioenergetics Chemistry: Bonding and Quantitative Chemistry Physics: Particle model and Atomic structure	Biology: Organisation (the body) Chemistry: Chemical Changes Physics: Forces	Biology: Ecology Chemistry: Chemistry of the Atmosphere
Skills and Key Knowledge Taught	<ul style="list-style-type: none"> -Photosynthesis reaction -Aerobic and anaerobic respiration -Atomic structure, ionic bonding and properties -Covalent and Metallic bonding and properties -Allotropes of carbon -Conservation of mass/apparent mass change, mass calculations -States and properties and changing state -Mass conservation -Density equation, density RP -Internal energy, latent heat calculations -Interpreting graphs, specific heat capacity (HT) -Ionising radiation and risk and Atomic Structure -Emission of EM radiation, alpha, beta, gamma -Use of types of radiation, nuclear equations, half-life and nuclear fusion 	<ul style="list-style-type: none"> -Digestive system (including food tests) -Enzyme action -Heart, blood, blood vessels, heart disease, lifestyle and non-communicable disease including cancer -Plant organs and tissues, plant and active transport -Atomic structure, ion formation -Metal oxides, reactivity series, displacement/metal extraction, OILRIG and ionic equations, making salts -Scalar & Vector, Weight calculations, Elasticity, Forces in motion including speed and acceleration, Newton's laws 	<ul style="list-style-type: none"> -Classification and communities -Biotic/abiotic factors -Distribution of organisms, adaptations, producers, consumers -Decomposers, cycling materials, waste management, land use and deforestation, global warming and maintaining biodiversity -Composition of the atmosphere, cycling of Carbon, Greenhouse effect and global warming, atmospheric pollutants.
Links for Support/ Help at Home	<ul style="list-style-type: none"> Use of student resources located within WHS SharePoint for students Use of additional homework booklets, therapy work packs, exam papers and/or additional resources from the class teacher via Synergy Use of online platforms such as GCSEPod and Seneca for podcasts Watching of documentaries linked to scientific issues studied Homemade experiments at home Youtube videos to watch practical demonstrations and additional teaching Teacher discussions following assessments and/or reports Participation in enrichment opportunities and/or extra-curricular activities 		

Year 11	Autumn Term	Spring Term	Summer Term
Topics Studied in AQA Trilogy Combined Science	Biology: Homeostasis and Response Chemistry: Chemistry of the Atmosphere & Using resources Physics: Waves	Biology: Inheritance, Variation and Evolution Chemistry: Organic Chemistry Physics: Forces and Motion and Magnetism/Electromagnetism	Class-based Variation in Revision Topics Students will be directed to revision based on student needs from PPE performance/teacher assessments. GCSE Exams Undertaken
Skills and Key Knowledge Taught	<ul style="list-style-type: none"> -Homeostasis and nervous system comparison -Reaction time, reflex actions and reflex arc -Endocrine system: blood glucose -Kidney function and failure -Reproductive hormones, contraception, hormones to treat infertility - Composition of the atmosphere, cycling of Carbon, Greenhouse effect and global warming, atmospheric pollutants. -Resources on our planet and sustainability. Potable water and wastewater treatment, Life cycle assessments and recycling. -Wave types and properties. Calculating wave speed and the required practical. EM waves and their properties. 	<ul style="list-style-type: none"> -Sexual and asexual reproduction -Meiosis -Sex determination -Protein synthesis -Genetic inheritance and genetic disorders, genetic engineering -Variation, selective breeding, evidence for evolution and extinction -Crude oil, fractional distillation, properties of hydrocarbons and alkanes. Cracking and alkenes -Scalar and vector and interaction pairs -$W=mg$, Resultant forces, Freebody diagrams -Distance and displacement, Speed and velocity, graphs, momentum, stopping distances, Newton's Laws -Magnetic poles and permanent/induced -Magnetic fields including RH rule, review electricity (current, resistance, PD basics) -Electromagnets, motor effect and Fleming's LH rule, $F=BIL$, electric motors 	<ul style="list-style-type: none"> -Accumulation of all content and skills
Links for Support/ Help at Home	<ul style="list-style-type: none"> Use of student resources located within WHS SharePoint for students Use of additional homework booklets, therapy work packs, exam papers and/or additional resources from the class teacher via Synergy Use of online platforms such as GCSEPod and Seneca for podcasts Watching of documentaries linked to scientific issues studied Homemade experiments at home Youtube videos to watch practical demonstrations and additional teaching Teacher discussions following assessments and/or reports Participation in enrichment opportunities and/or extra-curricular activities 		