

We follow the aqa combined science: trilogy syllabus for KS4. In year 10 we complete the paper one topics, all topics covered correspond to the syllabus point. At higher tier students will have 3 teachers, one for each specialism. Over a 2 week cycle students will have 3 lessons of Biology and Physics and 4 lessons of Chemistry.

Biology (4 lessons per fortnight)	Week 1-13		Week 14-24		Week 25-27		Week 30 - 40	
Topic	B2 – Organisation 1. 4.2.1 Principles of organisation 2. 4.2.2 Animal tissues, organs and organ systems <ul style="list-style-type: none"> a. Digestion b. Heart and circulation c. Cancer 3. 4.2.3 Plant tissues, organs and systems	Assessment week	B3 – Infection and Response 1. 4.3.1 Communicable diseases <ul style="list-style-type: none"> a. Bacteria b. Protists c. Virus d. Fungus e. Human defence f. Vaccination g. Drug discovery 	Assessment week	B4 – Bioenergetics (pt 1) 1. 4.4.1 Photosynthesis <ul style="list-style-type: none"> a. Equation b. Rate of photosynthesis c. Uses of glucose 	Mocks	B4 – Bioenergetics (Pt 2) 1. 4.4.2 Respiration <ul style="list-style-type: none"> a) Aerobic and anaerobic b) Response to exercise c) Metabolism B7 – Ecology 1. 4.7.1 Adaptations, interdependence and competition 2. 4.7.2 Organisation of an ecosystem 3. 4.7.3 Biodiversity and the effect of human interaction on ecosystems	

Chemistry (3 lessons per fortnight)	Week 1-9		Week 10-18		Week 19-26		Week 30 - 40
Topic	C2 structure and bonding 1. 5.2.1 Chemical bonds, ionic, covalent and metallic 2. 5.2.2 How bonding and structure are related to the properties of substances 3. 5.2.3 Structure and bonding of carbon	Assessment week	C4 – Chemical Changes 1. 5.4.1 Reactivity of metals a) Metal oxides b) Reactions of metals with water 2. 5.4.2 Reactions of acids a) Making salts b) Neutralisation c) Acids and Alkalis 3. 5.4.3 Electrolysis a) Predicting what will be produced at the anode and cathode in solution and molten b) Constructing half equations	Assessment week	C5 – Energy changes in chemical reactions 1. 5.5.1 Exothermic and endothermic reactions a. Reaction profiles b. Overall energy calculations C3 review and part 2 1. 5.3.1 Chemical measurements, conservation of mass and the quantitative interpretation of chemical equations 2. 5.3.2 Use of amount of substance in relation to masses of pure substances	Mocks	P2 – Electricity Pt 2 1. 6.2.4 Energy transfers a. National grid b. Power c. Energy transfer in everyday devices B7 – Ecology 1. 4.7.1 Adaptations, interdependence and competition 2. 4.7.2 Organisation of an ecosystem 3. 4.7.3 Biodiversity and the effect of human interaction on ecosystems

Physics (3 lessons per fortnight)	Week 1-11		Week 12-19		Week 20-25		Week 30-40
Topic	P2 part 1 - Electricity 1. 6.2.1 Current, potential difference and resistance 2. 6.2.2 Series and parallel circuits 3. 6.2.3 Domestic uses and safety	Assessment week	P3 Particle Model of Matter 1. 6.3.1 Changes of state and the particle model 2. 6.3.2 Internal energy and energy transfers 3. 6.3.3 Particle model and pressure	Assessment week	P4 Atomic Structure 1. 6.4.1 Atoms and isotopes <ul style="list-style-type: none"> a. History of the atom b. Atomic structure 2. 6.4.2 Atoms and nuclear radiation <ul style="list-style-type: none"> a. Half life b. Nuclear radiation equations c. Alpha, beta , gamma radiation 	Mocks	P5 – part 1 – Forces and their interactions 1. 6.5.1 Forces and their interactions 2. 6.5.2 Work done and energy transfer 3. 6.5.3 Forces and elasticity