Y11 Revision Summer 2022 Higher

Biology B1 Major Focus	Biology B2 Major Focus
• 4.1.2 Cell division • 4.2.2 Animal tissues, organs and organ systems • 4.4.1 Photosynthesis	• 4.5.3 Hormonal control in humans • 4.7.2 Organisation of an ecosystem • 4.7.3 Biodiversity and the effect of human interaction on an ecosystem
Biology Required practical P1	
• Required practical activity 3: use qualitative reagents to test for a range of carbohydrates, lipids and proteins. • Required practical activity 4: investigate the effect of pH on the rate of reaction of amylase enzyme. • Required practical activity 5: investigate the effect of light on the rate of photosynthesis of an aquatic plant such as pondweed.	
Biology Required practical P2	
• Required practical activity 7: measure the population size of a common species in a habitat. Use sampling techniques to investigate the effect of a factor on the distribution of this species	
Chemistry C1 Major Focus	**Chemistry C2 Major Focus**
• 5.2.2 How bonding and structure are related to the properties of substances • 5.3.2 Use of amount of substance in relation to masses of pure substances • 5.4.1 Reactivity of metals • 5.4.2 Reactions of acids • 5.4.3 Electrolysis • 5.5.1 Exothermic and endothermic reactions	• 5.6.1 Rate of reaction • 5.6.2 Reversible reactions and dynamic equilibrium • 5.7.1 Carbon compounds as fuels and feedstock • 5.8.1 Purity, formulations and chromatography • 5.9.1 The composition and evolution of the Earth's atmosphere • 5.10.1 Using the Earth's resources and obtaining potable water
Chemistry Required practical C1	
• Required practical activity 8: preparation of a pure, dry sample of a soluble salt from an insoluble oxide or carbonate, using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution. • Required practical activity 9: investigate what happens when aqueous solutions are electrolysed using inert electrodes. This should be an investigation involving developing a hypothesis. • Required practical activity 10: investigate the variables that affect temperature changes in reacting solutions such as, eg, acid plus metals, acid plus carbonates, neutralisations, displacement of metals.	
Chemistry Required practical C2	
• Required practical activity 11: investigate how changes in concentration affect the rates of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity. This should be an investigation involving developing a hypothesis. • Required practical activity 12: investigate how paper chromatography can be used to separate and tell the difference between coloured substances. Students should calculate Rf values.	
Physics P1 Major Focus	**Physics P2 Major Focus**
• 6.1.1 Energy changes in a system, and the ways energy is stored before and after such changes • 6.2.4 Energy transfers • 6.3.1 Changes of state and the particle model • 6.3.3 Particle model and pressure • 6.4.1 Atoms and isotopes • 6.4.2 Atoms and nuclear radiation	• 6.5.1 Forces and their interactions • 6.5.4.1 Describing motion along a line • 6.5.4.2 Forces, accelerations and Newton's Laws of motion • 6.5.5 Momentum • 6.6.2 Electromagnetic waves • 6.7.2 The motor effect
Physics Required practical P1	
• Required practical activity 14: an investigation to determine the specific heat capacity of one or more materials. The investigation will involve linking the decrease of one energy store (or work done) to the increase in temperature and subsequent increase in thermal energy stored. • Required practical activity 16: use circuit diagrams to construct appropriate circuits to investigate the I–V characteristics of a variety of circuit elements, including a filament lamp, a diode and a resistor at constant temperature.	
Physics Required practical P2	
• Required practical activity 21: investigate how the amount of infrared radiation absorbed or radiated by a surface depends on the nature of that surface.	