

Y10 End of Year Exam Preparation: *Triple Science*

Exam(s):

Exam 1: *Biology 100 marks (105 minutes)*

Exam 2: *Chemistry 100 marks (105 minutes)*

Exam 3: *Physics 100 marks (105 minutes)*

Revision Topic List - Biology	
Content	Skills
Enzymes and pH	Magnification calculations
Microscopes and making slides	Punnett squares
Cell structure	Analysing data in tables
Mitosis*	Calculating percentages
Growth	
Cancer	
Sexual/Asexual reproduction	
Structure of DNA	
Extraction of DNA from fruit	
Work of Mendel	
Protein synthesis	
Human Genome Project	
Evolution (inc human evolution)	
Work of Darwin and Wallace	
Stone tools	
Biological control	
Pathogens	
Antibiotics (including core practical)	
Immune System	
Plant defences	

Life cycle of a virus*	
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Revision Topic List - Chemistry	
Content	Skills
Chemical Cells	Balancing Equations
Transition Metals and Alloys	Maximum Mass
Acids	Percentage Yield and Atom Economy
Neutralisation core practical	Explaining Boiling Points
Bonding	Explaining Conductivity
Percentage yield and atom economy	Calculating Number of Atoms
Extracting Metals and Recycling	Redox Reactions
Redox Reaction	Deducing Stoichiometry
Titration	Percentage by Mass
Producing insoluble salts	Ionic Equations
Electrolysis	Calculating Molar Volumes of Gases
Bonding (giant covalent)*	
Dynamic Equilibrium*	

Revision Topic List - Physics	
Content	Skills
Nuclear Fusion	Standard form
Redshift	GPE calculations
Sankey Diagrams	KE calculations
Distance time graphs	Efficiency
Factors affecting collision force	Acceleration equations
PET scanners and radiotherapy	Half life calculations
Irradiation and contamination	Wave speed calculations
Half life	$F=ma$
Ultraviolet waves	Nuclear equations
Reflection	Momentum and force calculations
Refraction and critical angle	
Lenses and ray diagrams	
Velocity-time graphs	
Alpha, beta, gamma	
Background radiation	
Centripetal force	
Speed vs velocity	
Conservation of momentum and energy*	
Transverse waves	
SONAR*	