## Y11 Mock Exam Preparation: *Combined Science*

## Exam(s):

Exam 1: *Biology 60 marks (70 minutes)* Exam 2: *Chemistry 60 marks (70 minutes)* 

Revision Topic List - Biology (Foundation)	
Content	Skills
Structure of bacterial cells	Interpreting data in graphs
Investigating enzyme action	
Osmosis	
Stem cells	
Diploid vs haploid	
Selective breeding	
Defences against disease	
Investigating rate of photosynthesis	
Movement of water in a plant*	
Reforestation	
Quadrats and belt transects	

Revision Topic List - Biology (Higher)	
Content	Skills
Osmosis	Interpreting growth charts
Investigations into enzyme activity	Magnification calculations
Mitosis*	Drawing conclusions from data
Human Evolution	
Development of new medicines	
Root hair cell	
Sampling techniques	
Abiotic factors	
Use of fertilisers	
Parasites and mutualists	

Revision Topic List - Chemistry (Foundation)	
Content	Skills
Ions and ionic bonding	Calculating a mean
Metallic bonding	Calculating temperature change
Isotopes	Calculating Rf value
Chromatography	Calculating rate of a reaction
Changes of state	Word equations
Hazard symbols	Symbol equations
Group 1 metals*	Balancing equations
Group 7 (Halogens)	Drawing a graph
Rates of reaction (marble chips and hydrochloric acid)	
Endothermic and exothermic reactions	
Obtaining dry samples of precipitates	

Revision Topic List - Chemistry (Higher)	
Content	Skills
Chromatography	Calculating Rf value
Pure vs impure substances	Calculating rate of a reaction
Separation techniques - distillation*	Percentage by mass
Explaining differences in boiling points*	Relative atomic mass
Isotopes	Empirical formula from a diagram of a molecule
Reaction of metals and acids	Energy changes in exothermic reactions
Reactivity series	Symbol equations
Defining pH	Balancing equations

Gas tests	Drawing a graph
Exothermic reactions/reaction profiles	
Dynamic equilibrium	
Haber Process	
Group 1 metals*	
Rates of reaction (marble chips and hydrochloric acid)	