

## 2025 Y11 Mock 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                                 |
| Food tests                      | Punnet Squares                         |
| Mitosis                         | Using a microscope                     |
| Spread of disease               | Designing an experiment                |
| Methods of transport in cells   | Interpreting data in tables and graphs |
| Work of Mendel                  |                                        |
| Sexual/asexual reproduction     |                                        |
| Human Evolution                 |                                        |
| Classification                  |                                        |
| Structure of a leaf             |                                        |
| Transport in leaves             |                                        |
| CT/PEt scans                    |                                        |
| Monoclonal Antibodies*          |                                        |
| Neurones                        |                                        |
| Sex linked genetic disorders    |                                        |
| DNA - structure and extraction* |                                        |
| Menstrual cycle                 |                                        |
| Tissue culture                  |                                        |
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| Revision Topic List - Chemistry      |                               |
|--------------------------------------|-------------------------------|
| Content                              | Skills                        |
| Gas Tests                            | Calculating Number of Atoms   |
| Noble Gases                          | Maximum Mass                  |
| Investigating Rates of Reaction      | Calculating Concentration     |
| Hydrocarbons                         | Calculating Empirical Formula |
| Dot and Cross Diagrams               | Writing Ionic Equations       |
| Polymers                             | Calculating Energy Changes    |
| Carboxylic Acids                     | Calculating Molecular Formula |
| Alcohols                             |                               |
| Alkali Metals                        |                               |
| Energy Changes                       |                               |
| Allotropes of Carbon                 |                               |
| Combustion                           |                               |
| *Carbon Dioxide and the Atmosphere   |                               |
| Halogens                             |                               |
| *Polymers and Life Cycle Assessments |                               |

| Revision Topic List - Physics           |                                 |
|-----------------------------------------|---------------------------------|
| Content                                 | Skills                          |
| Density and pressure                    | $P = p \times g \times h$ calcs |
| Using radioactivity                     | Half life calculations          |
| Nuclear fission                         | Electrical power calcs          |
| Positrons                               | $Q = I \times t$ calcs          |
| Mains electricity in the home           | Transformer calcs               |
| Fuses                                   | Vector diagrams                 |
| Static electricity                      | Density calcs                   |
| Cooling curves                          | Pressure calcs                  |
| Particle model of matter                | Calculating area under a graph  |
| Properties of matter (SLH,SHC, density) |                                 |
| Transformers                            |                                 |
| Diodes                                  |                                 |
| Split ring commutators                  |                                 |
| Power of a lens                         |                                 |
| Virtual and real images                 |                                 |
| Temperature and radiation               |                                 |
| Hooke's Law                             |                                 |
| Stars                                   |                                 |

|                  |  |
|------------------|--|
| Nuclear fusion   |  |
| Big Bang theory* |  |
| Upthrust         |  |
| Gears*           |  |