Trilogy award Science Revision

Paper 1

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| **Biology** | **Foundation** | **Not being assessed** |
| B1 | Cell division | * Osmosis, * active transport, * Coronary heart disease: non-communicable disease, * uses of glucose from photosynthesis, respiration. |
| B2 | Animal tissues, organs and organ systems |
| B3 | Communicable diseases |
| B4 | Photosynthesis |
| Required practical’s | RP1: using a light microscope  RP3 using qualitative reagents to test for carbohydrates, lipids and proteins.  RP5: investigate effect of light on the rate of photosynthesis in an aquatic plant such as pondweed. |
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| **Chemistry** | **Foundation** |  |
| C1 | The Periodic table and trends of group 1,7 & 0. |
| C2 | Ionic, covalent, metallic bonding and their properties  Structure and bonding of carbon (diamond, graphite, fullerenes and graphene) |
| C4 | Reactivity of metals  Reactions of acids  Electrolysis |
| C5 | Exothermic and endothermic reactions |
| Required practical’s | RP8 Preparation of a pure, dry sample of a soluble salt.  RP9 Investigate what happens when aqueous solutions are electrolysed using inert electrodes  RP10 investigate the variable that affect temperature change in reacting solutions such as acid plus metals, acid plus carbonates, neutralisations, displacement of metal. |
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| **Physics** | **Foundation** | **Not being assessed** |
| P1 | Energy changes in a system and the ways energy is stored before and after such changes.  National and global energy resources | * Domestic uses and safety * Particle model and pressure * Atoms and isotopes |
| P2 | Current, potential difference and resistance |
| P3 | Changes of state and the particle model |
| P4 | Atoms and nuclear radiation |
| Required practical’s | RP 14 investigation to determine the specific heat capacity of one or more materials.  RP 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. |

Trilogy combined award Science Revision

Paper 2

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| **Biology** | **Foundation** | **Not being assessed** |
| B5 | Hormonal control in humans | * The human nervous system * Hormones in human reproduction * Contraception * Sexual and asexual reproduction * Meiosis * Sex determination * Variation * Evolution * Selective breeding * Extinction * Resistant bacteria * Adaptions * Biodiversity * Land use * Deforestation * Global warming * Maintaining biodiversity |
| B6 | Reproduction |
| B7 | Adaptations, interdependence and competition  Organisation of an ecosystem |
| Required practical’s | RP 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. |
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| **Chemistry** | **Foundation** | **Not being assessed**   * Carbon dioxide and methane as greenhouse gases. |
| C6 | Rates of reaction  Reversible reactions and dynamic equilibrium |
| C7 | Carbon compounds as fuels and feedstock |
| C8 | Purity, formulations and chromatography |
| C9 | The composition and evolution of the Earth’s atmosphere  Common atmospheric pollutants and their sources |
| C10 | Using the Earth’s resources and obtaining potable water |
| Required Practical’s | RP 11 investigating 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.  RP12 investigating how paper chromatography can be used to separate and tell the difference between coloured substances. Calculate Rf values. |
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| **Physics** | **Foundation** | **Not being assessed** |
| P5 | Forces and their interaction  Describing motion along a line  Forces, accelerations and Newton’s laws of motion  Forces and braking | * Forces and elasticity |
| P6 | Electromagnetic waves |
| P7 | Permanent and induced magnetism, magnetic forces and fields  The motor effect |
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| Required practical’s |  |