Chemistry Foundation Separate Award Science Revision

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| Paper 1 | Foundation | Not being assessed |
| C1 | Simple atomic model of the atom, symbols, relative atomic mass, electronic charge and isotopes  The periodic table | * Chemical cells and fuel cells |
| C2 | Chemical bonds, ionic, covalent and metallic  How bonding and structure are related to the properties of substances  Bulk and surface properties of matter including nanoparticles |
| C4 | Reactions of acid |
| C4 | Exothermic and endothermic reactions |
| Required practical | RP1 preparation of pure, dry sample of a soluble salt from an insoluble oxide or carbonate.  RP2 determination of the reacting volumes of solution of a strong acid and strong alkali by titration.  RP4 investigate the variable that affect temperature changes in reacting solution such as acid plus metals, acid plus carbonates, neutralisations, displacement of metals. |
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| Paper 2 | Foundation | Not being assessed |
| C6 | Rates of reaction  Reversible reactions and dynamic equilibrium | * Identification of common gases |
| C7 | Carbon compounds as fuels and feedstock |
| C8 | Identification of ions by chemical and spectroscopic means |
| C9 | The composition and evolution of the Earth’s atmosphere |
| C10 | Using the Earth’s resources and obtaining potable water  Life cycle assessment and recycling  The Haber process and the use of NPK fertilisers |
| Required practical | RP5 Investigating how changes in concentration affect the rates of reaction by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity.  RP6 investigate how paper chromatography can be used to separate and tell the difference between coloured substances. Students should calculate Rf value.  RP8 analysis and purification of water samples from different sources, including pH, dissolved solids and distillation. |

Chemistry Higher Separate Award Science Revision

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| Paper 1 | Higher | Not being assessed |
| C1 | The periodic table | * Bulk and surface properties of matter including nanoparticles |
| C2 | Chemical bonds, ionic, covalent and metallic  How bonding and structure are related to the properties of substances  Structure and bonding of carbon |
| C3 | Uses of amount of substance in relation to masses of pure substances (Moles) |
| C4 | Reaction of metals  Reactions of acids  Electrolysis |
| C5 | Exothermic and endothermic reactions |
| Required practical | RP1 preparation of pure, dry sample of a soluble salt from an insoluble oxide or carbonate.  RP2 determination of the reacting volumes of solution of a strong acid and strong alkali by titration.  RP4 investigate the variable that affect temperature changes in reacting solution such as acid plus metals, acid plus carbonates, neutralisations, displacement of metals. |
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| Paper 2 | Higher | Not being assessed |
| C6 | Rates of reaction  Reversible reactions and dynamic equilibrium | * Carbon dioxide and methane as greenhouse gases |
| C7 | Carbon compounds as fuels and feedstock |
| C8 | Identification of ions by chemical and spectroscopic means |
| C9 | The composition and evolution of the Earth’s atmosphere |
| C10 | Using the Earth’s resources and obtaining potable water  The Haber process and the use of NPK fertilisers |
| Required practical | RP5 Investigating how changes in concentration affect the rates of reaction by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity.  RP7 use of chemical tests to identify the ions known single ionic compounds covering the ions from sections Flame tests through to Sulfates. |