Subject: GCSE Chemistry Science Trilogy

Year: 10

Autumn HT1 (approx. 14 lessons) Chapter 1/2	**Autumn HT2 (approx. 14 lessons) Chapter 2/4**	**Spring HT1 (approx. 10 lessons) Chapter 4**	**Spring HT2 (approx. 12 lessons) Chapter 4/3**	**Summer HT1 (approx. 12 lessons) Chapter 4/5**	**Summer HT2 approx. 6 lessons) Chapter 6**
1. Elements and compounds 2. Formulae and equations 3. Mixtures 4. History of the atom 5. Structure of the atom 6. Ions, atoms and isotopes 7. Electronic structure 8. Development of the periodic table 9. Metals and non metals 10. Exploring group 0 11. Exploring group 1	1. States of matter 2. Ionic bonding 3. Properties of ionic compounds 4. Covalent bonding 5. Properties of small molecules 6. Polymer structures 7. Giant covalent structures 8. Graphene and fullerenes 9. Metallic bonding 10. Properties of metals and alloys	1. Acids and metals 2. Neutralisation 3. Soluble salts 4. RP making a salt 5. pH and neutralisation 6. Strong and weak acids 7. The process of electrolysis 8. Electrolysis of molten ionic compounds 9. Using electrolysis to extract metals 10. Electrolysis of aqueous solutions	1. RP Electrolysis 2. Electron transfer 3. Balancing equations 4. Conservation of mass 5. Relative formula mass 6. Moles 7. Amounts of substances 8. Moles to balance equations 9. Concentrations of solutions 10. Limiting reactants 11. Percentage yield 12. Atom economy	1. Atom economy 2. Volume of gases 3. Endothermic and exothermic reactions 4. RP temperature changes 5. Energy level diagrams 6. Energy change calculations 7. Measuring rates 8. Collision theory and rates	1. Reversible reactions and energy change 2. Equilibrium 3. Changing concentration and equilibrium 4. Changing temperature and equilibrium 5. Changing pressure and equilibrium

12. Exploring group 7 13. Reaction trends and predicting reactions 14. States of matter	11. Metal oxides 12. Reactivity series 13. Displacement 14. Extraction of metals and reduction			9. The effect of temperature 10. The effect of concentration and pressure 11. The effect of catalysts 12. RP rate of reaction	