YEAR 11 CHEMISTRY WORK PLAN: Semester 1, 2017 - Mr M Polkinghorne



| UNIT | TERM 1 TOPICS | ASSESSMENT | DUE DATE |
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| In the Beginning – | Week 1 Why study chemistry? Branches of chemistry. The scientific method. What is matter? States of Matter – classification. Week 2 Physical /Chemical changes. Observing and describing change. Compounds Mixtures. FeS prac | Formative Task Gravimetric Analysis of a Mixture X | Week 3 Wednesday 8 th Feb 2 groups 11A and 11B |
| - Chemistry Matters | Week 3 Mixtures— homogeneous/heterogeneous/ simple separation techniques — magnetism, filtration/evaporation, distillation, sublimation, separating funnel. Gravimetric Analysis of Mixture X = Fe, NaCl and sand SiO ₂ Week 4 Chromatography - Rf values & analysis. Review. | SA – Supervised Assessment 1 Part A (KCU, EC) 60 minutes | Week 5 Wednesday Weds/Thurs 22/23 February |
| | Week 5 Atomic Structure and reactivity of metals v non-metals, lonic bonding. Week 6 Covalent bonding / Network solids –diamond/graphite. Week 7 Metallic bonding - samples/props/uses/physical properties of metals in relation to bonding model, alloys / uses / problems. Week 8 Chemical formulae / Naming compounds Balancing equations. Week 9 Test Week 10 Begin Unit 2 | SA – Supervised Assessment 1 Part B (KCU, EC) 60 minutes | Term 2 Week 2 Mon 24 th April L 2 & 3 |
| UNIT | TERM 2 TOPICS | ASSESSMENT | DUE DATE |
| Getting Down to Earth — Metals & Mining | Week 1 Intro. types of reactions involving metals. Reactions of metals with oxygen/ ionic/basic oxides/ oxidation. Simple REDOX theory - OIL RIG Week 2 Reactivity series / Reactions of metals with water (K, Na, Ca, Mg) Corrosion of metals. Reactions of metals with acids. Ionic equations. Week 3 Ionisation Energy theory in relation to reactivity of metals Week 4 Extraction of metals— smelting and electrolysis Week 5 The corrosion of metals—in particular the rusting of iron Week 6 EEI | EEI Task 2–Extended Experimental Investigation – Investigating the Corrosion of Metals (KCU,IP,EC) | Week 3 Given Out – Wednesday May 3 rd . Week 8 Draft Due - Wednesday June 7 th . |
| | Week 7 EEI Week 8 EEI Week 9 EEI Report writing Week 10 EEI report due. | 6 weeks: | Week 9 Final EEI Due Wednesday 14 th June |