## Chemistry - Foundation Tier

| Topic | Content |
| :--- | :--- |
|  | Hazard symbols, state symbols, balanced symbol equations, word <br> equations |
| CC1- states of matter | Changes of state, state change graphs, |
| CC2 - separating mixtures | Chromatography, Rf calculations |
| CC4 - atomic structure | Properties of metals, groups of periodic table, electron <br> configuration, |
| CC5 \& CC6 - bonding | lonic bonding vs covalent bonding |
| CC8 - acids and alkali | Precipitation reactions, Core practical: preparing copper sulfate <br> crystals, Core practical: investigating neutralisation, gas tests, |
| CC9 - calculations | Calculating empirical formula |
| CC10 - electrolysis | Electrolysis definition, equipment, predicting the products of <br> electrolysis, |
| CC11- extracting metals | Reactivity series, extracting metals from the Earth's crust. |

## Chemistry - Higher Tier

| Topic | Content |
| :--- | :--- |
| CC1- states of matter | Changes of state, melting points of pure and impure substances |
| CC2 - separating mixtures | Filtration, chromatography, Rf value calculation |
| CC5 \& CC6 - bonding | Properties of ionic and covalent substances, writing formulae |
| CC8 - acids and alkali | Core practical: investigating neutralisation, pH scale logarithm, Core <br> practical: preparing copper sulfate crystals, oxidation \& reduction |
| CC9 - calculations | Moles calculations, concentration calculation, empirical formula |
| CC10 - electrolysis | Electrolysis of solutions, gas tests, Core practical: Electrolysis of <br> copper sulfate solution, |

## Chemistry - Higher Tier Triple

| Topic | Content |
| :--- | :--- |
| SC1 - states of matter | Melting points of pure and impure substances |
| SC2 - separating mixtures | Filtration, chromatography, Rf value calculation |
| SC5 \& SC6 - bonding | Properties of ionic and covalent substances, writing formulae |
| SC8 - acids and alkali | Core practical: investigating neutralisation, pH scale logarithm, <br> titrations |
| SC9 - calculations | Moles calculations, concentration calculation, empirical formula |
| SC10 - electrolysis | Electrolysis of solutions, gas tests, Core practical: Electrolysis of <br> copper sulfate solution, |

