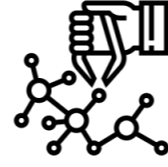
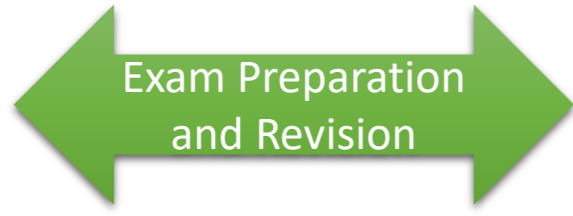


GCSE Chemistry Learning Journey

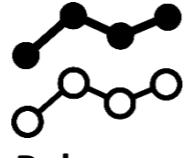


Bulk and Surface Properties of Matter

Nanoparticles Composite materials Choosing materials *HSW: Identifying ions* Anion testing Cation testing Flame tests and photometry



Qualitative Analysis



Polymers

HSW: Investigating the combustion of alcohols Ethanol production Carboxylic acids Addition polymerisation Polymer properties Polymer uses Condensation polymerisation Problems with polymers



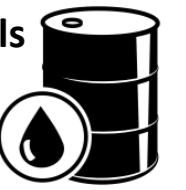
Hydrocarbons, alcohols and carboxylic acids

Alkene homologous series



Earth and Atmospheric Science

Climate change The Earth's changing atmosphere Complete and incomplete combustion Alkane homologous series Fractional distillation and cracking



Fuels

Year 11



Groups in the Periodic Table

Yields, atom economy and concentration Titration calculations *HSW: Acid-Alkali Titration* Alkali metals Halogen reactivity Noble gases **Rates of Reaction** Collision theory *HSW: Factors affecting rates of reaction* Catalysts and activation energy



Quantitative Analysis



Rates of Reaction

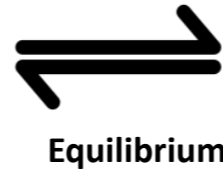
Endothermic and exothermic reactions



Transition Metals, Alloys and Corrosion

Transition metal properties and corrosion

Fertilisers and the Haber process Dynamic equilibrium



Equilibrium

Life cycle assessment and recycling Oxidation and reduction

Metal ores, reactivity and extraction



Obtaining and Using Metals

HSW: Electrolysis of copper sulfate

Electrolysis and products from electrolysis



Acids and Alkalis

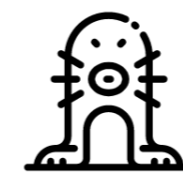
Acids, alkalis and indicators Strong and weak acids

HSW: Preparing copper sulfate

Alkalis and balancing equations

HSW: Investigating neutralisation

Reactions acids and solubility



Quantitative Chemistry

Conservation of mass and empirical formula

Avogadro's constant

Year 10

ORMISTON SWB ACADEMY

Electrolytic Processes

