



مدرسة الكويت الانجليزية  
KUWAIT ENGLISH SCHOOL

**Key Stage 4: Curriculum Information for Year 10**  
(Subject to change)

Year	Autumn Term		Spring Term		Summer Term
10	<b>Atomic Structure</b>  Atoms and elements  Isotopes & radioactivity  Electronic structure and configuration  <b>Bonding</b>  Ions  Ionic bonding  Ionic compounds and their properties  Covalent bonding  Covalent compounds and their properties.	<b>Electrolysis</b>  Conductors & insulators  The principles of electrolysis  The reactions at the electrodes  The electrolysis of brine  Refining Copper  Electroplating  <b>Revision for the end of term examination.</b>	<b>Organic Chemistry</b>  Petroleum: a fossil fuel  Refining petroleum  Cracking hydrocarbons  Families of organic compounds:  Alkanes  Alkenes  Alcohols  Carboxylic acids  Esterification	<b>Polymerisation</b>  Addition polymerisation  Condensation polymerisation  Making use of synthetic polymers  Plastics and recycling  Natural polymers	<b>Quantitative Chemistry</b>  The mole  Calculations from equations  Reactions involving gases  Finding the concentration of a solution  Empirical and molecular formulae  Finding percentage yield and purity  <b>Revision for the end of year examination.</b>

### Key Stage 4: Curriculum Information for Year 11

Year	Autumn Term		Spring Term		Summer Term
11	<b>Metals</b>  Metallic structure and alloys  Comparing metals for reactivity  Metals in competition  The reactivity series  Metals in the Earth's crust  Extracting metals from their ores  Making steel  Electrochemical cells	<b>Rates of Reaction</b>  Measuring the rate of a reaction  Changing the rate of a reaction  Explaining rates  Catalysis  Photochemical reactions  Separation techniques revision.  <b>Revision for the Mock IGCSE examination.</b>	<b>Energetics</b>  Energy changes in reactions  Explaining energy changes  Energy from fuels  <b>Equilibria</b>  Reversible reactions  Shifting equilibrium	<b>Industrial Processes</b>  The Haber Process  The Contact Process  Sulfur and sulfuric acid  Making fertilisers  Carbon and the carbon cycle  Greenhouse gases and global warming	<b>Air, Water and Carbonates</b>  Composition of air  Making use of air  Limestone and its uses  <b>Revision for the IGCSE examination.</b>