Overview: Welcome to A-level Chemisrty. The bridge between GCSE and A level is a big step up, it is also an exciting one.

This year you will look at the fundamental foundations of Cemisty: The periodic table and start to grasp the organic and inorganic nature of chemistry

You will also start to gain skills in practical ready for university as you work towards your practical endorsement

Term 1

Structure and Bonding, Periodicity, Atomic Structure & Amount of Substance

<u>SM</u> Looking at how different chemical bonds occur and the properties.

<u>P</u> The study of trends within the periodic table and how these can be explain through our understanding of the different elements.

<u>AS</u> How the fundamental particles are arranged to form atoms, the basis for all matter.



Year 12 Chemistry

Term 3

Alkenes, Alcohols, Organic Analysis, Redox Reactions, Group 2 & Group 7

<u>Alk</u> The chemistry of alkenes and carbon to carbon double bonds.

Alc From the different ways of producing alcohols and the ethics behind them

OC How both experimental and instrumental methods can be used to enable chemists to identify the structures of unknown organic compounds.

RR Students learn about the key concept of electron transfer within chemistry and how it drives reactions to occur.

G2&G7 The trends within group 2 &7 as well as the chemistry of the elements and their uses.

Term 2 Kinetics, Equilibrium, Haloalkanes, Intro to Organic Chemistry & Alkanes

<u>K</u> The study of how quickly a reaction occurs, learn more about the rate of a reaction.

E Students also learn about Kc an expression used to determine the position of equilibrium.

<u>H</u>Looking at the haloalkanes, the introduction of the idea of nucleophiles.

ITOC What is organic chemistry and why is it so vitally important?

<u>A</u> What are alkanes and how are they obtained.