

# Chemistry

#### Course Overview

A level chemistry has changed from modular to linear assessment. 20% of the A level marks require the use of higher GCSE maths skills. All of the assessment for the A level will come from 3 external examinations at the end of Year 13.

# **Entry Requirements**

- 7 recommended in all science subjects taken at GCSE, with a 7 recommended in Maths
- Minimum 6 grades in core and additional science, 6 in Maths and English
- Minimum 6 grades in Biology in all science subjects

You must have maturity, self-discipline, good study skills and the motivation to succeed.

#### A-Level Year 1

#### **Physical Chemistry**

Including atomic structure, amount of substance, bonding, energetics, kinetics, chemical equilibria and le Chatelliers.

#### Inorganic Chemistry

Including periodicity, group 2 the alkaline earth metals, group 7, the halogens.

#### Organic Chemistry.

Including introduction to organic chemistry, alkanes, halogenoalkanes, alkenes, alcohols and organic analysis.

## A-Level Year 2

#### **Physical Chemistry**

Including thermodynamics, rate equations, equilibrium constant (Kc) for homogenous systems, electrode potentials and electrochemical cells.

## Inorganic Chemistry

Including properties of period 3 elements and their oxides, transition metals and reactions of ions in aqueous solution.

## Organic Chemistry

Including optical isomerism, aldehydes and ketones, carboxylic acids and their derivatives, aromatic chemistry, amines, polymers, amino acids, proteins and DNA, organic synthesis, NMR spectroscopy, chromatography.