

# CHEMISTRY

## WHY STUDY THIS COURSE?

Chemistry is the study of matter and energy and the interaction between them. There are many reasons to study Chemistry, even if you aren't pursuing a career in science. Chemistry is everywhere in the world around you! It's in the food you eat, clothes you wear, water you drink, medicines, air, cleaners - you name it.

## COURSE DETAILS

**Qualification:** A' level Chemistry

**Awarding Body:** AQA

**Entry Requirements:** 5

GCSE grades 4-9 including

English Language. Maths

grade 6 plus GCSE

Chemistry grade 6

OR Science Trilogy 6,6

Chemistry sometimes is called the "central science" because it connects other sciences to each other, such as Biology, Physics, Geology and Environmental Science. Chemistry is a well respected A' level that can open up many pathways for the future from medicine, to patent law, forensic science or farming.

## COURSE STRUCTURE & ASSESSMENT

There are three exams at the end of the two years for A' level, all of which are two hours long. At least 15% of the marks for A' level Chemistry are based on what you learn in your practicals.

- Paper 1: Physical and Inorganic Chemistry
- Paper 2: Physical and Organic Chemistry
- Paper 3: Applied and Practical Chemistry

Physical Chemistry includes work on: atomic structure, amount of substance, bonding, energetics, thermodynamics, kinetics, chemical equilibrium and acid base chemistry.

Inorganic Chemistry includes work on: redox, periodicity, Group 2 the alkaline earth metals, Group 7(17) the halogens, electrode potentials and electrochemical cells, period 3 elements and their oxides, and properties and reactions of transition metals.

Organic Chemistry includes work on: alkanes, halogenoalkanes, alkenes, alcohols, organic analysis, optical isomerism, aldehydes and ketones, carboxylic acids and derivatives, aromatic chemistry, amines, polymers, amino acids, proteins and DNA, organic synthesis, NMR spectroscopy and chromatography.

“ I've been at Lymm since starting high school in Year 7. I chose to continue my studies into Sixth Form here as I feel comfortable within the school community and confident in the teachers. You get so much support from the teachers and Sixth Form staff - they're always willing to help.

I really enjoy Organic Chemistry and the practical sessions. I intend to study medicine at university and

have found the introduction to biochemistry invaluable.

Whilst studying for my A' levels I was lucky enough to have the opportunity to visit Wythenshawe Hospital. I was given a tour around the breast cancer centre which gave me an insight into the hospital environment and this confirmed my desire to study medicine.



ELLEN THOMAS