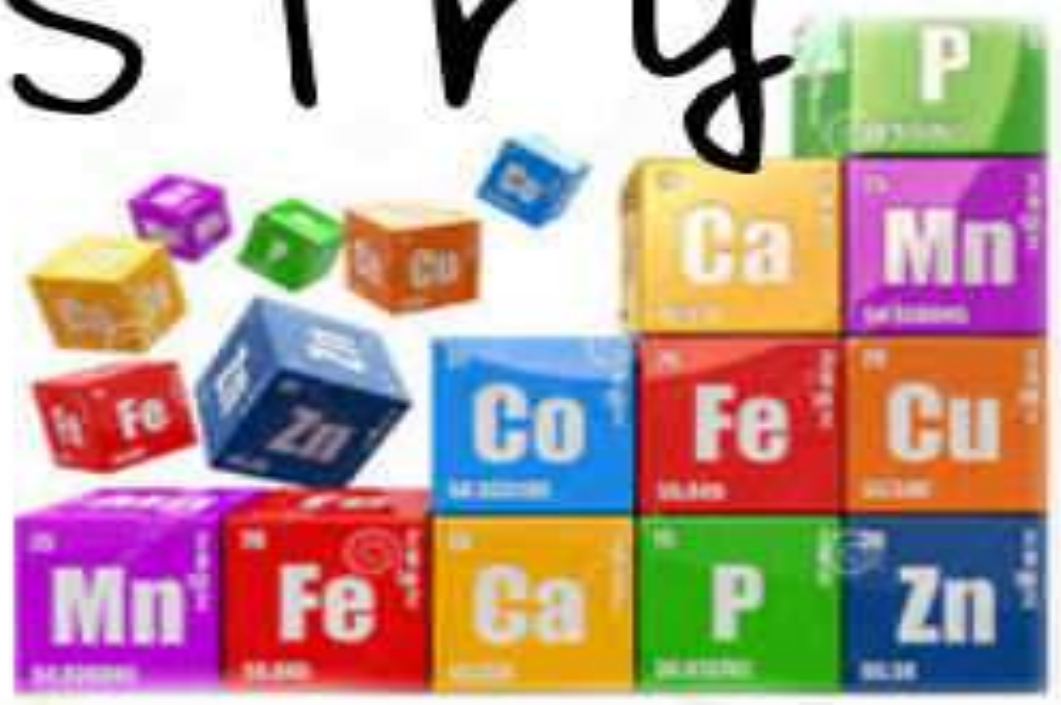




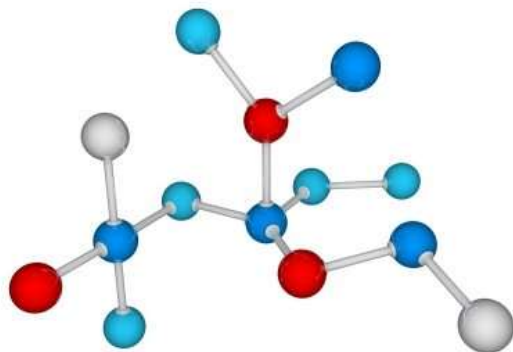
# Chemistry



# Why study A-level Chemistry?

## Students like:

- being challenged by the subject and made to think for themselves
- how their knowledge and skills are built as the course progresses
- how comprehensive the course is, which gives them an insight into different kinds of chemistry
- the hands-on work in the lab



## Knowledge/skills gained:

- an understanding of how the chemical elements interact and the role they play in making up our world and beyond
- an appreciation of How Science Works
- The relevance of science beyond the laboratory
- analytical, evaluative and synoptic skills
- practical skills, including the ability to plan and manipulate information and data

# Potential Career Paths from A-Level Chemistry

Career paths that A-Level Chemistry can open up for you include:

- Medicine
- Veterinary Science
- Environmental Science
- Engineering
- Toxicology
- Developing consumer products
- Metallurgy (studying how metals behave)
- Space exploration
- Physiotherapy
- Developing perfumes and cosmetics
- Pharmaceuticals
- Energy
- Science writing
- Software Development
- Teaching
- Research



# A-level Chemistry at a glance

- **Physical Chemistry**

- Atomic structure
- Calculations
- Moles
- Bonding
- Rates of reactions
- Acids and bases



- **Inorganic Chemistry**

- Trends in the Periodic Table
- Transition metals

- **Organic Chemistry**

- Carbon based chemistry
- Analytical techniques
- Polymers
- Amino acids, proteins & DNA



# Assessments

## Paper 1

### What's assessed

- Relevant Physical chemistry topics (sections 3.1.1 to 3.1.4, 3.1.6 to 3.1.8 and 3.1.10 to 3.1.12)
- Inorganic chemistry (Section 3.2)
- Relevant practical skills

### How it's assessed

- written exam: 2 hours
- 105 marks
- 35% of A-level

### Questions

105 marks of short and long answer questions



## Paper 2

### What's assessed

- Relevant Physical chemistry topics (sections 3.1.2 to 3.1.6 and 3.1.9)
- Organic chemistry (Section 3.3)
- Relevant practical skills

### How it's assessed

- written exam: 2 hours
- 105 marks
- 35% of A-level

### Questions

105 marks of short and long answer questions



## Paper 3

### What's assessed

- Any content
- Any practical skills

### How it's assessed

- written exam: 2 hours
- 90 marks
- 30% of A-level

### Questions

40 marks of questions on practical techniques and data analysis

20 marks of questions testing across the specification

30 marks of multiple choice questions

# A-level Practical Assessment

- **A-level grades will be based only on marks from written exams.**
- A separate **endorsement of practical skills** will be taken alongside the A-level. This will be assessed by teachers and will be based on direct observation of students' competency during practical work.
- There are **12 Required Practicals** that must be carried out by all students taking the course.
- Written papers will assess knowledge and understanding of these, and the skills exemplified within each practical.

# Our requirements

- If you are on the 'Separates' route – 7 in Chemistry and 6 in Maths
- If you are on the 'Dual' route – 7 in Chemistry part of Science paper and 6 in Maths