

Why choose to study GCSE Chemistry?

In order to consider the 3 Separate Sciences at GCSE, a pupil should already be achieving good marks in each science and be working with enthusiasm and commitment, at a high level. He should be teacher assessed at grades A*-B as the teaching will be aimed at the higher grades of GCSE. Chemistry is the science that sits across Biology and Physics, containing elements of both. Therefore, it is supportive of both. This option should be taken by pupils who thoroughly enjoy a practically based, challenging subject that demands an understanding of underlying principles to work things out. It is exciting and will help students to understand a lot about the world around them and the constant technological advances that are being made to make our phones smaller, be able to do more etc.

What will I learn?

Module 1: The fundamental ideas about atoms and compounds; how limestone is used and turned into useful building materials; how metals are extracted from their ores and why metals are so useful; that our fuels come from crude oil and how fuels are produced and polymers made; that oils can also come from plants, including cooking and emulsions; and how our planet has changed since its formation.

Module 2: The detail of the structure, bonding and properties of elements and compounds including Nano science; how the quantities of reacting chemicals can be calculated; how the rate of a reaction can be controlled and changed and why these changes occur; how electricity can be used as energy to bring about chemical reactions and how the products can be predicted and for the electrolysis of brine - what they are used for.

Module 3: How the Periodic Table was developed and how it can be used to make predictions; the chemistry of hard water and how it can be softened; how much energy is involved in chemical reactions and how it can be quantified; how materials are analysed for their metallic and non-metallic content; how ammonia is synthesised; the organic chemistry of alcohols, carboxylic acids and esters.

The theme of 'How Science Works' runs through every module.

How is GCSE Chemistry assessed?

Chemistry 1	(H or F)	25% (end of year 11)
Chemistry 2	(H or F)	25% (end of year 11)
Chemistry 3	(H or F)	25% (end of year 11)
Chemistry coursework		25% (completed during lesson time)

Where will GCSE Chemistry lead?

Course progression	Career opportunities
GCSE Chemistry provides a firm foundation for A level Chemistry as it gives an insight into all the areas that will be built on, including calculation work. It is also a really helpful GCSE to have for studying Biology based A levels.	Agricultural Scientist Art Restorer, Dentist, Medic, Engineer, Geologist, Horticulturalist, Lab technician, Nutritionist, Oceanographer, Pharmacist, Physiotherapist, Photographer, Vet, Scientific Archaeologist , Surveyor among many other careers.

What do students say about GCSE Chemistry?

"It is the key to opening doors. It is fun, useful and easy to understand."

"An interesting, fun-filled, rewarding challenge."

"It is the only thing that gets me up in the morning. I dream about my next lesson."

"Chemistry is the most interesting of the sciences. It deals with atoms, helping you to understand the world around you. It's hard but worth it."