



Highsted Grammar School

The Chemistry curriculum

The study of Chemistry allows students to develop their knowledge and understanding of the work at the atomic level.

Chemistry sparks interest and fascination with bangs and smells in practical experiments and demonstrations all relevant to everyday life.

Through students' acquisition of knowledge and understanding in Chemistry, students become capable and confident scientists ready to take on the world's challenges for the future.

Content

Years 9-11

Atomic structure and the periodic table, structure, bonding and the properties of matter, chemical changes, energy changes, chemical analysis and atmospheric science.

Sixth Form

Sixth form Chemistry consolidates previous learning with an appreciation of the relevance of sustainability to all aspects of scientific developments. Advanced content includes thermodynamics, energetics, kinetics, equilibria, redox, inorganic and organic chemistry.

Examples of cross-curricular links

With Maths, e.g. big and small numbers in Chemistry and questions such as 'How many copper atoms are there in a one pence piece?'

With History, e.g. DNA and the discovery of the double helix in the 1950s.

With Geography, e.g. gas and water chemistry and the amount and location of magma inside a volcano.

Extra-curricular opportunities

Cambridge Chemistry Challenge, sixth form immersion talks