

## Overview

The course is broadly divided into the following main sections:

- Structures
- Trends
- Chemical Reactions
- Analysis
- Organic Chemistry
- Materials

The topics covered at GCSE add to some of the ideas and concepts introduced at Key Stage 3. For Example:

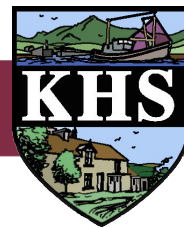
- States of matter
- Material
- Chemical Reactions
- Earth Resources
- Acids and Bases
- Human Impact on the Environment

Other ideas and concepts will be new. These include:

- Organic Chemistry
- Electrochemistry
- Kinetics
- Thermodynamics

A considerable amount of the course is dedicated to experimental work. GCSE Chemistry is highly recommended for those students who wish to pursue AS Level Chemistry and A2 Level Chemistry. NB. You cannot choose Chemistry and Single Award Science.

Unit	Content	Assessment
<b>1: Structures, Trends, Chemical Reactions, Quantitative Chemistry and Analysis</b>	In this unit you will examine atomic structure, as well as bonding and larger structures. The main features of the Periodic Table are highlighted. You will use formulae, balanced symbol equations, ionic equations and observations to examine the chemistry of metals and metal compounds with acids. You are introduced to simple quantitative mass calculations. You will also experience tests for positive and negative ions and investigate solubility, experimentally and quantitatively.	35% of Final Grade  Written Exam at the end of Year 11



Unit	Content	Assessment
<b>2: Further Chemical Reactions, Rates and Equilibrium, Calculations and Organic Chemistry</b>	This unit contains sections on the reactivity series of metals and water. It also examines chemical change in terms of types of reactions and chemical equilibrium. Organic chemistry focuses simply on four different homologous series, and titrations are included.	40% of Final Grade  Written Exam at the end of Year 12
<b>3: Practical Skills</b>	Two practical examinations and one written examination. Both are externally marked	25% of Final Grade

### Careers

Agricultural Scientist, Chemist, Biochemist Laboratory Technician, Environmental Health Officer, Scenes of Crime Officer, Biotechnologist, Chemical Engineer, Pharmacist, Pharmacologist, Pharmacy Technician, Photographic Technician, Forensic Scientist, Industrial Chemist, Materials Scientist/Technologist, Chemistry Teacher, Art Restorer, Metallurgist, Nature Conservationist, Research Scientist, Oceanographer, Scientific Archaeologist, Water Technologist, Careers in Food, Science and Technology, Animal Technician, Chemical Plant Process Operator