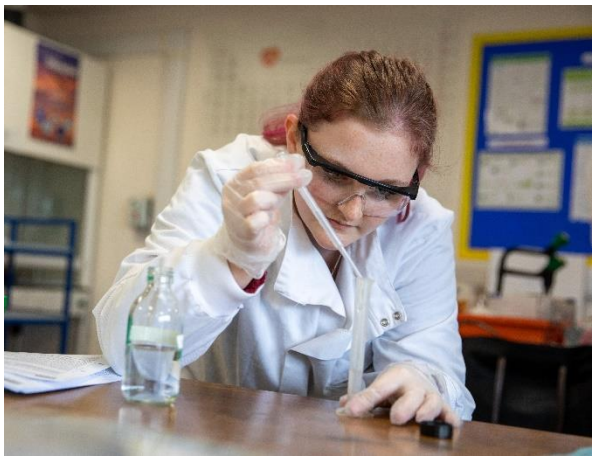
The modern world makes use of many new and exciting forms of matter: non-stick surfaces, bullet-proof vests, tailor-made medicines and biodegradable polymers - to name but a few.



Are you interested in:
- **practical chemistry**
- **applications of science**
- **problem solving**
- **scientific research**
- **application of Maths**

Leading to a career in:
- **Analytical chemistry**
- **Biochemistry**
- **Vet Science**
- **Chemical Engineer**
- **Pharmacologist**

and many more ……

Teacher to contact:
Miss K Forrest
Exam Board: OCR

A-level

The **Salters Chemistry B** course concentrates on the applications of the chemical concepts studied. Building on your experience at GCSE, this is a very practical course, and looks at a range of issues including some of the following: pollution due to the burning of fuels, how halogens can be extracted from the sea, our changing atmosphere and the relevance of polymers in our lives.

The following modules are covered:

Module 1: Elements of Life
This looks at elements and compounds in the Universe, the human body and recaps quantitative chemistry.

Module 2: Developing Fuels
This looks at the composition of fuels, the energy released in their combustion, issues linked to pollution and the development of more sustainable fuels.

Module 3: Elements from the Sea
This module covers the extraction of halogens from minerals in the sea, together with a study of their properties and uses of these elements and their compounds.

Module 4: The Ozone Story
This module discusses the important processes that occur in the ozone layer and how CFCs caused ozone depletion.

Module 5: What's in a Medicine
This module focuses on the synthesis and purification of aspirin.

It discusses different functional group chemistry and methods of analysis.

Module 6: The Chemical Industry
This covers the importance of rates of reaction and equilibria to chemical processes.

Module 7: Polymers and Life
This focuses on condensation polymers, proteins and enzymes. It also covers DNA and its role in synthesising proteins. Plus, it extends knowledge of spectroscopic techniques.

Module 8: Oceans
This module looks at the role of oceans in dissolving substances and maintaining pH.

Module 9: Developing Metals
This module develops ideas about the reactions and properties of transitions metals.

Module 10: Colour by Design
This final module covers why organic compounds are coloured and the use of chemistry to provide different dyes to order.

The A-level course incorporates the 10 modules described above.

Alongside these modules, there is an emphasis on developing chemical literacy and the separate Practical Endorsement provides students with lots of opportunities to develop and practise their investigative and problem-solving skills, through practical activities.

CHEMISTRY

CHEMISTRY

Assessment of the A-level course

2a. Overview of A Level in Chemistry B (Salters) (H433)

Learners must complete all components (01, 02, 03 and 04).

Content Overview	Assessment Overview	
Development of practical skills in chemistry (Section 2c) **Storylines (Section 2d)** • Elements of life • Developing fuels • Elements from the sea • The ozone story • What's in a medicine? • The chemical industry • Polymers and life • Oceans • Developing metals • Colour by design **Chemical literacy (Section 2e)** **Practical Endorsement**	Fundamentals of chemistry (01) 110 marks 2 hours 15 minutes written paper	**41%** of total A level
	Scientific literacy in chemistry (02) 100 marks 2 hours 15 minutes written paper	**37%** of total A level
	Practical skills in chemistry (03) 60 marks 1 hour 30 minutes written paper	**22%** of total A level
	Practical Endorsement in chemistry (04)	**Reported separately**

Entry requirements:

It is expected that you would achieve a GCSE Level 6 in Chemistry and Maths, or Double Science and Maths.