

# Chemistry

This bridging work **MUST** be completed by the time you start your course and it will be assessed in September. The aims are for you to be ready to start learning at post 16 level.

## What do you do in your first year?

---

Exam board OCR A. No course work, exam only.

Content Overview	Assessment Overview	
Content is split into four teaching modules: <ul style="list-style-type: none"><li>• Module 1 – Development of practical skills in chemistry</li><li>• Module 2 – Foundations in chemistry</li><li>• Module 3 – Periodic table and energy</li><li>• Module 4 – Core organic chemistry</li></ul> Both components assess content from all four modules.	Breadth in chemistry (01)* 70 marks 1 hour 30 minutes written paper	<b>50%</b> of total AS level
	Depth in chemistry (02)* 70 marks 1 hour 30 minutes written paper	<b>50%</b> of total AS level

\*Both components include synoptic assessment.

You will have two compulsory exam papers at the end of Year 12 assessed internally:

1. Breadth in Chemistry, written, 1.5 hours, 70 marks, 50% of your total mark.
2. Depth in Chemistry, written, 1.5 hours, 70 marks, 50% of your total mark.

## Summer Bridging Work- ESSENTIAL

---

1. Download and print the OCRA Chemistry Specification from the OCR website:  
<https://www.ocr.org.uk/qualifications/as-and-a-level/chemistry-a-h032-h432-from-2015/#as-level>

Read through this to begin to familiarize yourself with the course.

2. Visit the RSC (Royal Society of Chemistry) website. Read an interesting news article and think about how it relates to Chemistry.

3. Look online and see if you can gain access to a Chemistry journal - Chemistry Review and New Scientist are good ones! Have a read of an interesting Chemistry article.
4. Log onto Moodle > KS4Science > Year 11 to Year 12 - Chemistry A Level Bridging Task
  - Open **Module 1 - Practical Skills in Chemistry reading pack**
  - Read all pages carefully, make detailed notes including diagrams, calculations etc.
  - LEARN this content
  - Once you have learnt this content, you will need to complete **8 Quizzes**. All quizzes can be found on **Moodle**. KS4Science > Year 11 to Year 12 - Chemistry A Level Bridging Task
  - Each quiz will test knowledge on the pages you should have read.
  - You must attempt ALL 8 QUIZZES.
  - You must achieve 100% in each test as you can take each test an unlimited number of times
  - On the first lesson in September, Chemistry will check for completion of quizzes.
  - All quizzes will provide you with instant grade and feedback on answers.

## Summer Bridging Work- RECOMMENDED

---

Below is a list of recommended reading. It is not compulsory for you to purchase all of these books, you may wish to purchase a few and read them over the summer to give you an idea of what to expect during your A Level studies.

### Books

Elegant Solutions: Ten beautiful experiments in Chemistry	Philip Ball
Molecules at an Exhibition	John Emsley
Vanity, Vitality and Virility: The Science behind the products you love to buy	John Emsley
Nature's Building Blocks	John Emsley
Mauve	Simon Garfield
Oxygen: The molecule that made the world	Nick Lane
Right Hand Left Hand: Origins of asymmetry in brains, bodies, atoms & cultures	Chris McManus
Molecules That Changed The World	KC Nicolaou & T Montagnon
Mendeleyev's Dream: The quest for the elements	Paul Strathern

### Magazines/Periodicals

Chemistry Review  
New Scientist  
Scientific American

### Websites

RSC Education <http://www.rsc.org/Education/SchoolStudents/index.asp>  
Chemguide <http://www.chemguide.co.uk/>

### Books for those looking to study Chemistry specifically at University

Atkin's Molecules

Peter Atkins

Why Chemical Reactions Happen

James Keeler & Peter Wothers

Quantum Mechanics for Chemists

David Hayward

Aromatic Chemistry

John Hepworth

A Guidebook to Mechanism in Organic Chemistry

Peter Sykes

## Required Resources

---

Bring lined paper, dividers and a folder to each of your first Chemistry lessons.

You will need a lab coat for this course. It would be useful if you purchased this in advance.

The recommended text book is 'OCR AS/A level Chemistry A' **ISBN: 9781447990789**