A Level Chemistry at RPS

Class of 2023

Why study chemistry?

One of the most **respected** and **impressive** A-Levels to have, in both science and non-science related careers.

Chemistry plays a role in almost every action on earth, in every object we touch. If you're interested in **understanding, contributing to and improving the world around you**, then Chemistry will open doors you may not have even thought of.

Why study chemistry?

Great opportunity to develop your **logic, problem-solving, numeracy and creativity**, whilst preparing you for the most challenging and competitive degrees and careers.

Chemists are 15% **more likely to be employed** than other careers (and they're **paid more** too!). Over 70% will enter a **professional** career.

What is it like doing A-level Chemistry?

*"Most of Year 12 is **building on GCSE**, but in more depth!"*

*"I understand my GCSE work more now, as we're finally t**aught why things happen**."*

*"You realise **how important Chemistry is** in everything, when you see how **many degrees require a Chemistry A-Level**."*

What is it like doing A-level Chemistry?

"I expected Chemistry to be tough, but ***all my subjects are a massive jump****!"*

"It's ***challenging, but so worth it****! The rewarding feeling you get when you nail a difficult topic and you get your test result back… it* ***makes you really proud of yourself!****"*

True

- ✓ Chemistry is **challenging**
- ✓ You won't always come out of a lesson and understand something straight away
- ✓ There is **no such thing** as: "Chemistry doesn't go with my other A-Levels"
- ✓ The average A-Level has a pass rate of 95.6%, whereas A-Level Chemistry has a **pass rate of 96.1%**

False

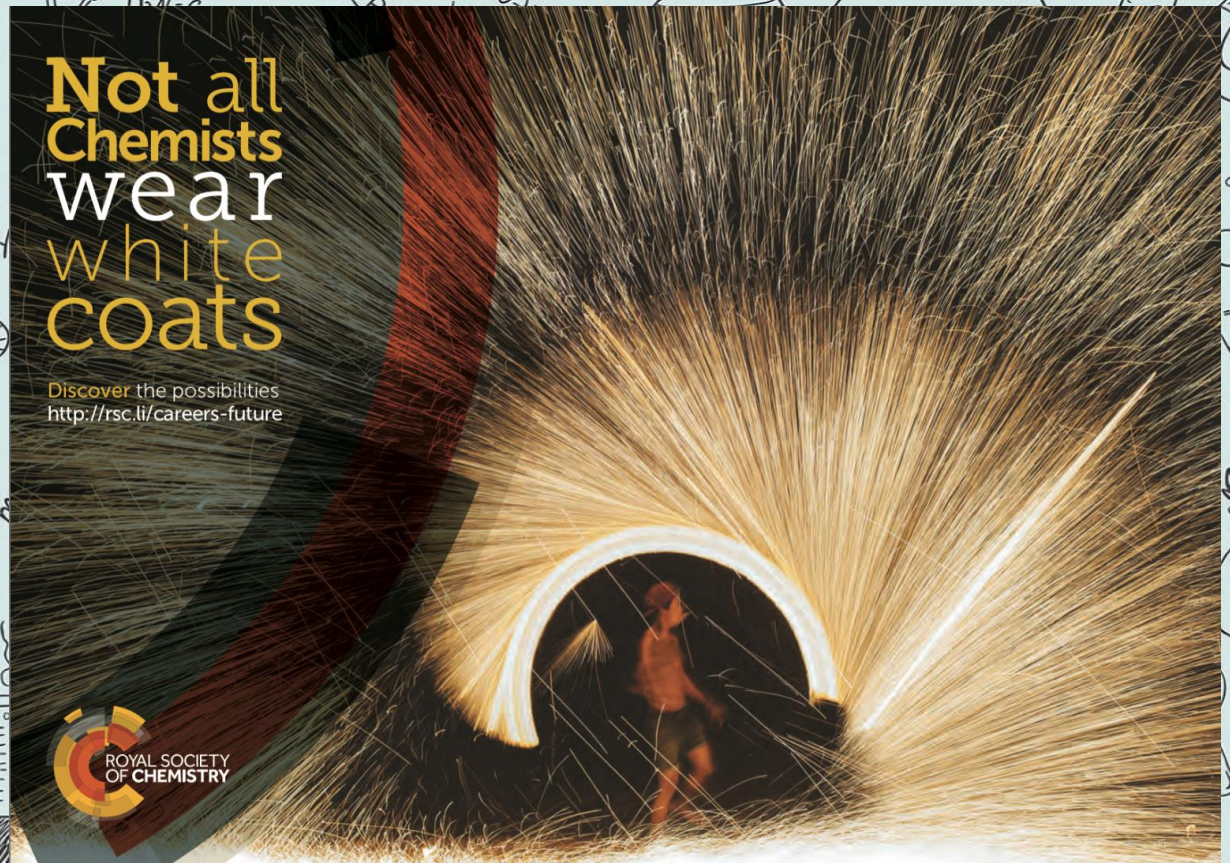
- ✗ You need to know **A-Level Maths** for Chemistry
- ✗ You should **also do another** Science A-Level
- ✗ I won't be as good at A-Level if I did **Combined Science**

The A-Level Chemist at RPS

- **Organised** - keep on top of your notes
- Motivated to **study outside of lessons**
- **Ask for help** when you need it
- **Revise for every test** as if it counts towards your final grade - it's the only way to make progress
- **Resilient** - Chemistry is not easy and you won't always hit your target grade on the first go at a topic
- In it for the long haul - **it will take the whole 2 years of hard work**, to get to the grade you'd like

BUT IT IS SO, SO WORTH IT

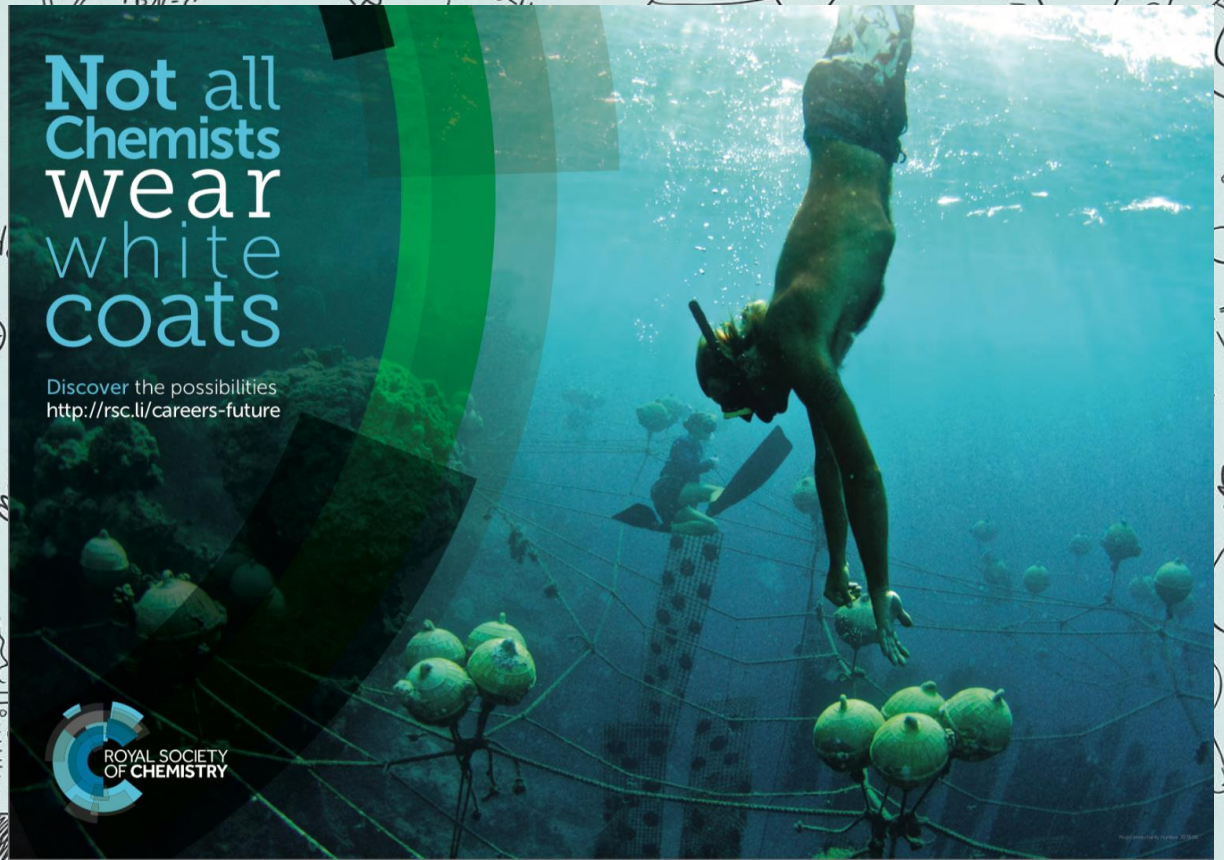
Where can Chemistry take you?



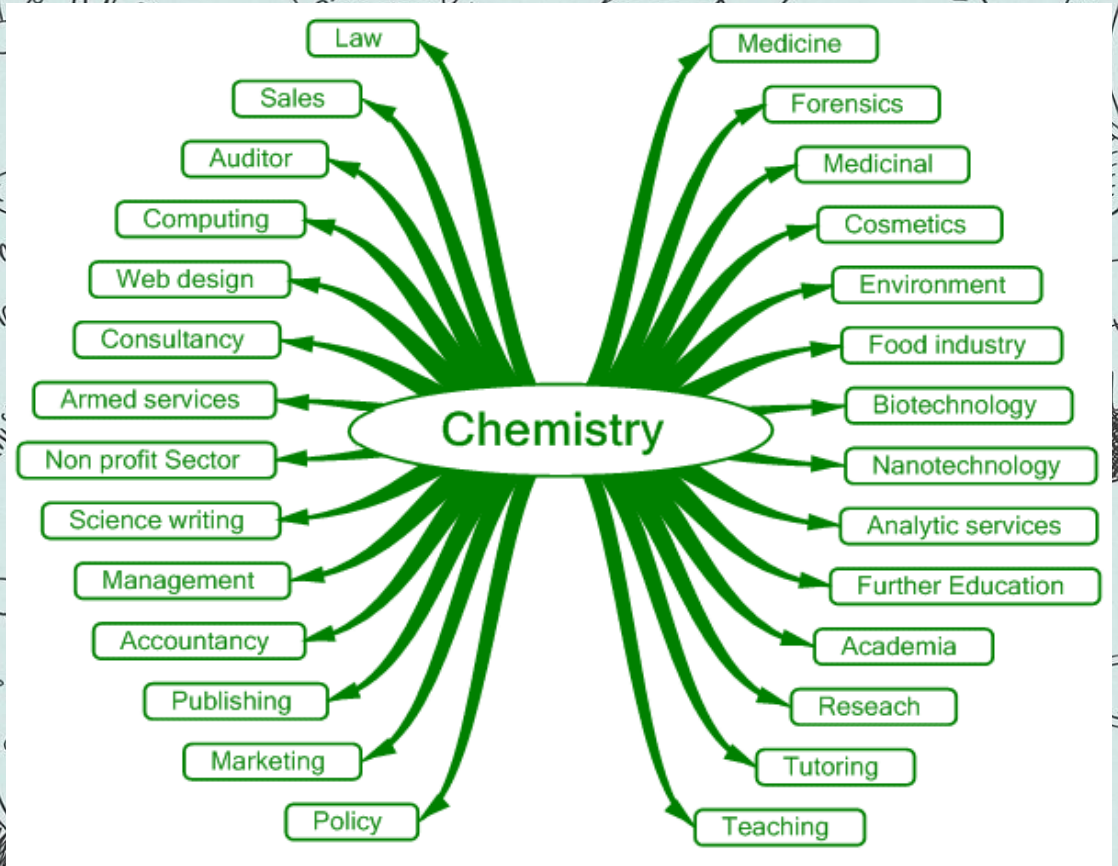
Where can Chemistry take you?

Where can Chemistry take you?

Where can Chemistry take you?



Where can Chemistry take you?



TRY

CHEMISTRY.

TRY

CHEMISTRY.

RPS Chemistry Leavers

Chemistry
Biochemistry
Medicine
Mathematics
Biology
Veterinary Medicine
Environmental Earth Sciences
Engineering
Economics & Maths
Human Biology
Psychology

University of Oxford
University of Warwick
Royal Veterinary College London
University of St Andrews
University of Sheffield
University of Liverpool
University of Glasgow
Queen Mary University of London
Queen's University Belfast

OCR Chemistry A - Year 12 Modules

Module 2 – Foundations in chemistry

- Atoms, compounds, molecules and equations
- Amount of substance
- Acid–base and redox reactions
- Electrons, bonding and structure

Module 3 – Periodic table and energy

- The periodic table and periodicity
- Group 2 and the halogens
- Qualitative analysis
- Enthalpy changes
- Reaction rates and equilibrium (qualitative)

Module 4 – Core organic chemistry

- Basic concepts
- Hydrocarbons
- Alcohols and haloalkanes
- Organic synthesis
- Analytical techniques (IR and MS)

OCR Chemistry A - Year 13 Modules

Module 5 – Physical chemistry and transition elements

- Reaction rates and equilibrium (quantitative)
- pH and buffers
- Enthalpy, entropy and free energy
- Redox and electrode potentials
- Transition elements

Module 6 – Organic chemistry and analysis

- Aromatic compounds
- Carbonyl compounds
- Carboxylic acids and esters
- Nitrogen compounds
- Polymers
- Organic synthesis
- Chromatography and spectroscopy (NMR)

OCR Chemistry A - The exams

Periodic table, elements and physical chemistry (01) 100 marks 2 hours 15 minutes written paper	**37%** of total A level
Synthesis and analytical techniques (02) 100 marks 2 hours 15 minutes written paper	**37%** of total A level
Unified chemistry (03) 70 marks 1 hour 30 minutes written paper	**26%** of total A level

Practical Endorsement in chemistry (04)

(non exam assessment)

Entry requirements

Minimum of GCSE grade 6 in Chemistry

or

Minimum of GCSE grade 6,6 in Combined Science

---

and **Minimum** of GCSE grade 6 in Maths

and **Minimum** of GCSE grade 5 in English Language

Questions?

Email me - h.budarkiewicz@roundwoodpark.co.uk

Come speak to me in the Science office

Speak to your GCSE Chemistry teacher

Ask the Sixth Formers session - watch this space for more details soon!