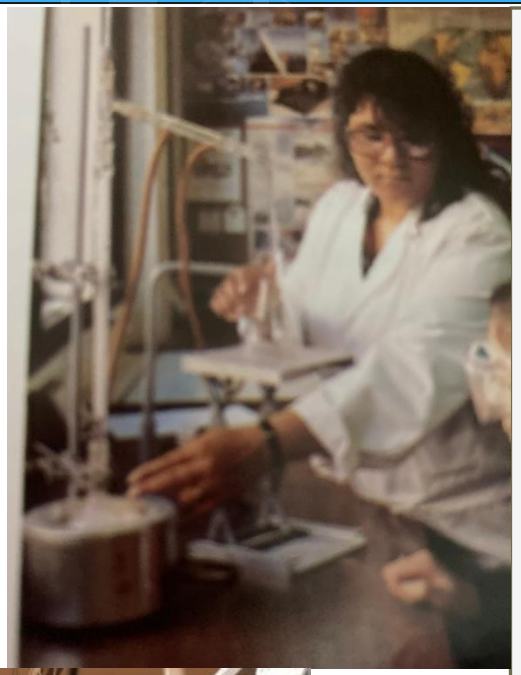
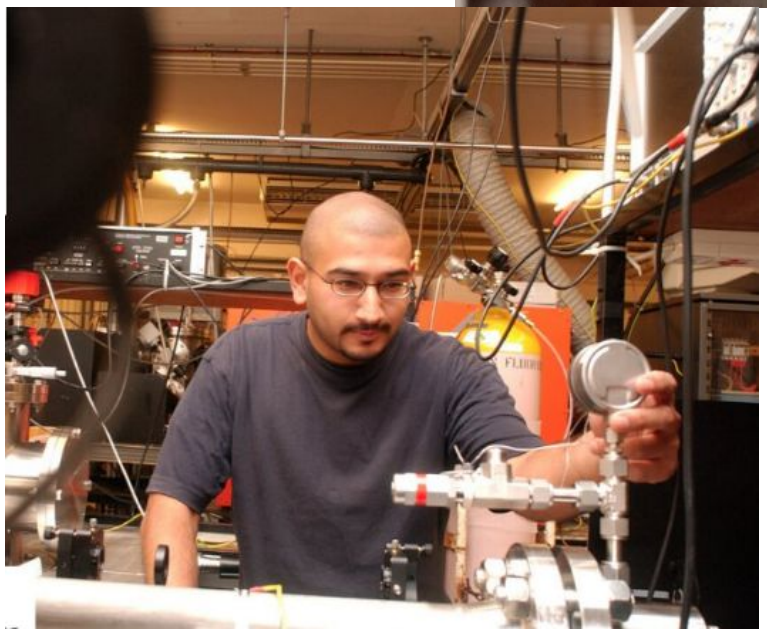




A Level Chemistry Introduction

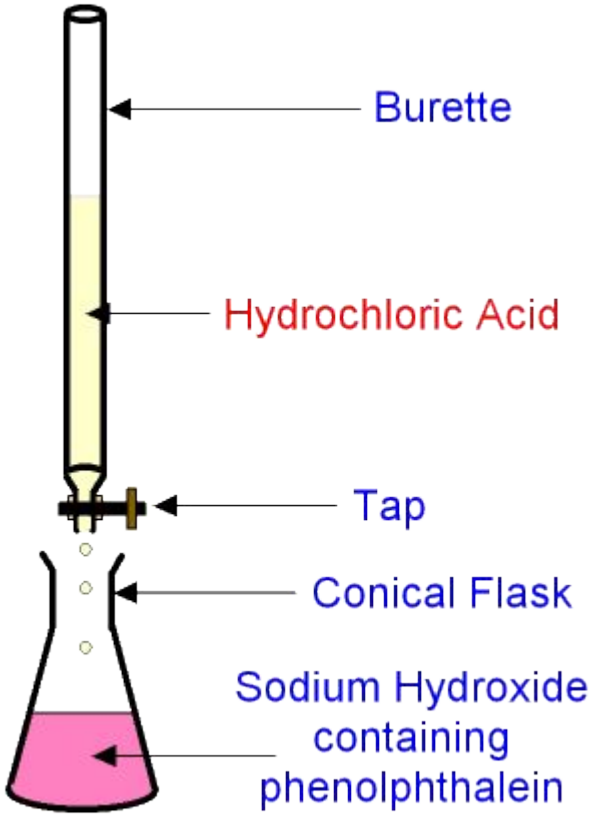
Mrs Roberts and

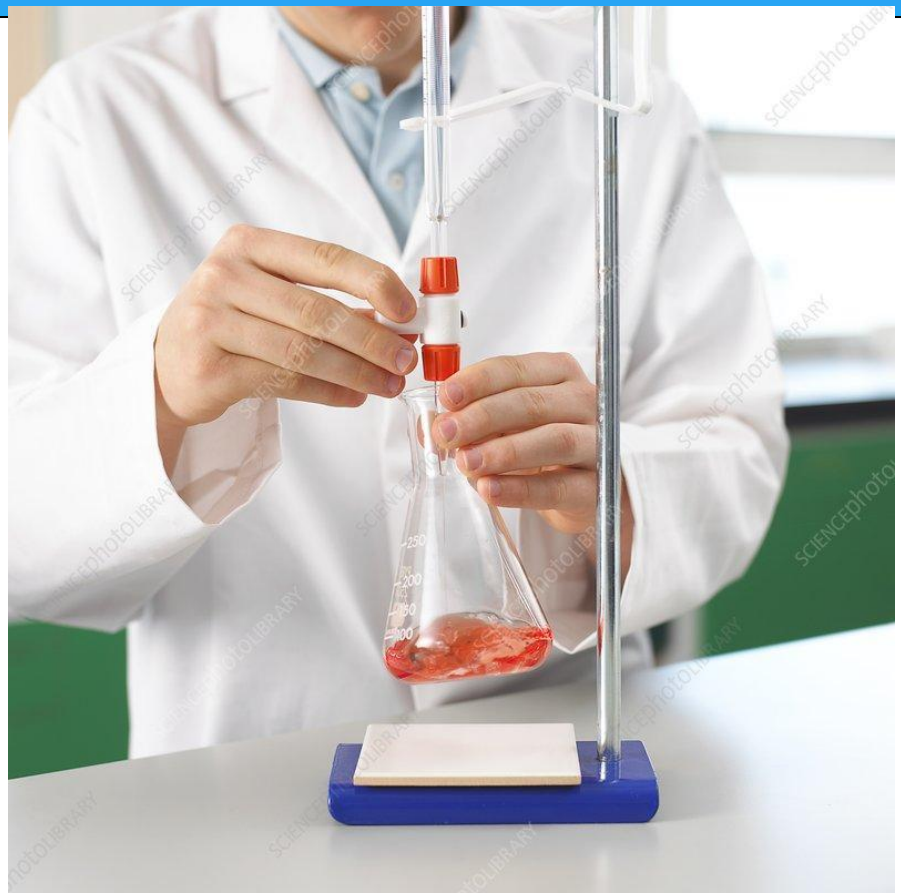
Dr Patel

Why pick Chemistry?

- Opens up a range of possibilities for further study and careers associated with the subject. Most sciences at universities require you to take **at least two sciences at A level**
- Chemistry is also taken by many law applicants as it shows you can cope with difficult concepts. Chemistry can also complement a number of arts subjects.
- Allows you to **develop your transferable skills** including investigating, problem solving, research, decision making, mathematical skills and analytical skills.

Titration Experiments



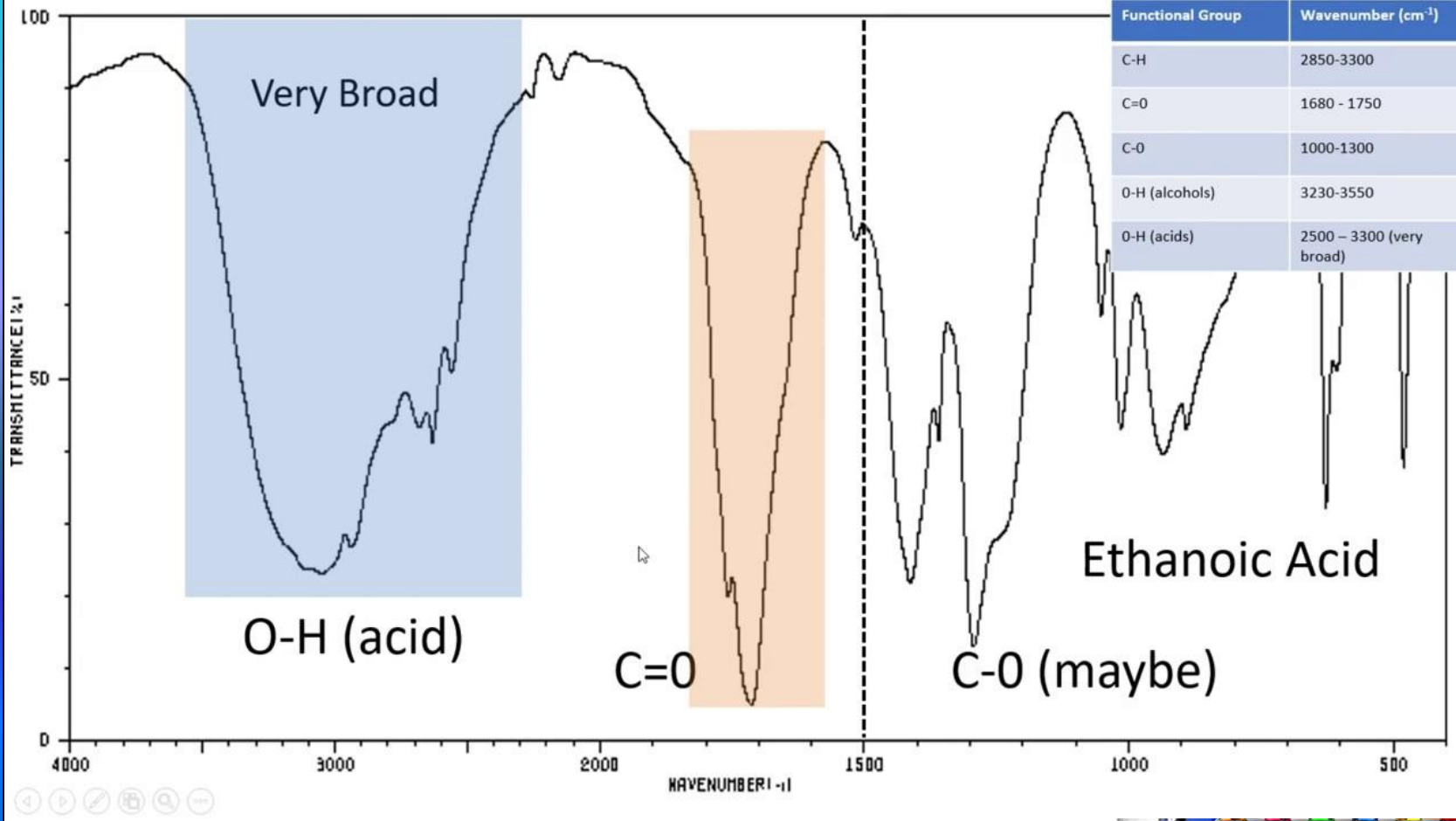


A level Chemistry what to expect

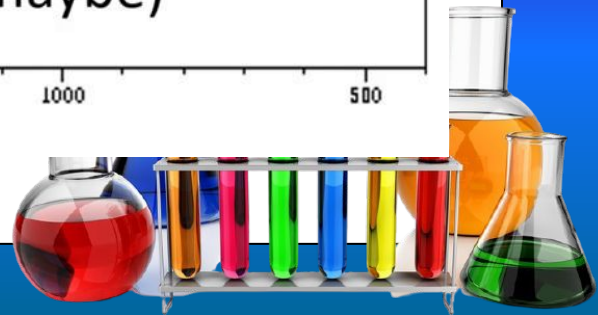
- A **challenging course** including a range of subject knowledge and a **strong emphasis on mathematics**
- A **range of PAGs** (practicals) which you will be assessed on, and at the end of the course given a pass or fail- most universities require a pass
- Total of **6 hours of examinations** (2 x 2 hours 15 minutes and 1 x 1 hour 30 minutes) taken at the end of the course.

Oxidation of Alcohols using reflux apparatus

Spectral Analysis



Functional Group	Wavenumber (cm^{-1})
C-H	2850-3300
C=0	1680 - 1750
C-0	1000-1300
0-H (alcohols)	3230-3550
0-H (acids)	2500 – 3300 (very broad)



Requirements

- At least a **grade 6 in GCSE Chemistry**
- At least a **grade 6-6 in GCSE Combined Science**
- At least a grade **6 in GCSE Maths**
- Advised that you take Chemistry alongside another mathematical or science subject such as: maths, further maths or biology. These subjects will support you in chemistry and your chemistry skills will also help in those subjects

Characteristics you need to succeed in A level Chemistry

- **Determination**- it's a big step up from GCSEs and will require work in school and out to keep up
- **Organisation**- notes across the two years will need to be organised into folders for your revision. And there will be folder checks!
- **Passion**- you need to want to do this subject and enjoy it

Modules

- Two main splits: **organic** and **inorganic** chemistry

- Alkanes
- Alkenes
- Alcohols
- Haloalkanes
- Organic synthesis
- Spectroscopy

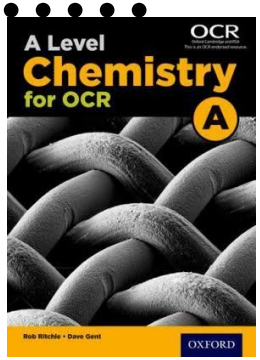
- Atoms, ions and compounds
- Amount of substance
- Acids and redox
- Electrons and bonding
- Shapes of molecules and intermolecular forces
- Periodicity
- Reactivity trends
- Enthalpy
- Reaction Rates and equilibrium

If you're up for the challenge, what to do next……

Text books:

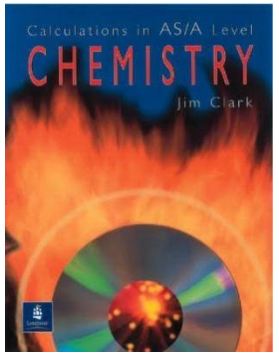
- **A Level Chemistry for OCR A**

  ISBN 978-0-19-835197-9



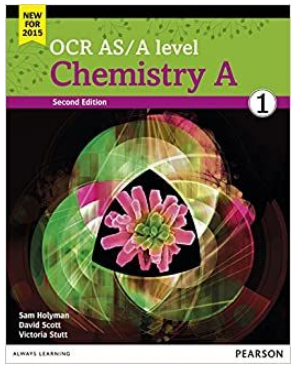
- **Calculations in AS/A Level Chemistry** (If maths weakness)

  ISBN 978-0582411272



- **OCR AS/A level Chemistry A year 1**

  ISBN 978-1-4479-9078-9



Folders:

- Recommended two **lever arch folders** one for each year

Its not all fun and games get started now…

Compulsory (On Google Classroom)

- **Summer tasks** and **transition tasks** enable you to **bridge the gap** between GCSE and A level as well as see what A level chemistry is like
- **Summer task** deadline: Friday 17th July (email me completed tasks)
- **Transition task** deadline: Friday 4th September (First Chemistry lesson)

Hope to see you in September…

- I know this has been fact filled but please take time to research the subject and make sure its best for you and what you want to do in the future
- Make sure chemistry is something you enjoy!!
- Please feel free to email us if you have any questions or want to know more about what you'll be learning.

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