# Independent Study in Chemistry

Effective students do at least **five** hours independent work per A level subject but your homework won't take up five hours...what else should you be doing?

## Make sure you understand the topic and where it fits into the course

- Go through your notes, the specification (in the 'About' tab of the Google Classroom) and the textbook (specification to textbook links:
  - http://fdslive.oup.com/www.oup.com/oxed/secondary/science/AFY\_Edexcel\_Chemistry\_Grid\_final.pdf?region=uk)
- Do they make sense if not do something about it: read the textbook; search on the internet; ask a friend; email your teacher
  - o <a href="http://www.chemguide.co.uk/">http://www.chemguide.co.uk/</a>
  - o <a href="http://www.docbrown.info/page13/page13.htm">http://www.docbrown.info/page13/page13.htm</a>
- How does the topic link with what you have done previously this doesn't necessarily mean earlier in the topic, for example, the reduction of dichromate (VI) ions to chromium (III) is an example of redox and is used to oxidise primary and secondary alcohols and aldehydes in organic chemistry

#### Learn the material

- Create revision materials e.g. flash cards
- Practise key words from the glossary
   (http://fdslive.oup.com/www.oup.com/oxed/secondary/science/Advanced\_Chemistry\_For\_You\_Glossary.pdf?region=uk)
- Use your revision materials for active *retrieval practice* i.e. write or say answers don't just look at them (see 'Six strategies for effective learning' in the 'About' tab of the Google Classroom)

### Practise with the material

- The textbook has questions at the end of each chapter and synoptic questions at the end of the book answers in the back of the book or on the website:
  - http://fdslive.oup.com/www.oup.com/oxed/secondary/science/Advanced\_Chemistry\_For\_You\_Answers\_pdf?region=uk
- Use past paper questions from the website:
   <a href="https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/chemistry-2015.html">https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/chemistry-2015.html</a> (The questions from the old specification will also be useful <a href="https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/chemistry-2008.html">https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/chemistry-2008.html</a>)

## Scheduling work

- Aim to revisit work irregularly (*interleave*)
- It is useful to review material after:
  - 1 day
  - 1 week
  - 1 month
  - 1 year
- Plan a schedule to ensure all work is covered and recovered.