

**A-Level Chemistry A level Guide**

**How Chemistry will be taught:**

You will have 5 lessons a week split between two teachers.

Initially both teachers will be focusing on Physical Chemistry, once this is complete one teacher will teach the Physical and Inorganic chemistry and the other Organic chemistry.

Lessons will consist of explanations, worked examples, practical work and exercise completion. Lessons will have some time available for exercise completion from the course textbook or exam questions from the exam board; however, the majority of this will be done outside of lessons as homework. There will also be lesson time available to consolidate and go through the exercises completed outside of the classroom where needed.

At the end of each unit, an assessment will happen in class, you will be expected to revise for this and there will be time to go through any issues after if required.

**Working expectations:**

* Attend all lessons
* Complete organised and neat notes
* Complete all tasks to the best of your ability
* Ask for help if required
* Work well independently and with others
* Be willing to share ideas

**What 100% effort in this subject looks like:**

* Completing all exercises set on time - do not fall behind as it can result in your failing to understand subsequent topics.
* Seeking help when you are struggling and not leaving questions in exercises incomplete.
* Completing additional tasks/reading around the subject in your own time

**Folder Policy:**

*Your folder should have:*

* Clear notes on each topic
* Separate sections for each teacher and topic
* Marked homework and tests to show progress
* Other revision materials in the back of the folder

**What marking looks like:**

* Assessed homework will be marked and graded
* Topic assessments will be marked and graded
* Any class exercises/exam questions will be self marked in green pen

**What homework looks like:**

* Exam questions
* Research tasks
* Planning presentations

**Specification at a glance:**

|  |  |  |
| --- | --- | --- |
| **Physical chemistry** | **Inorganic chemistry** | **Organic chemistry** |
| * Bonding * Thermodynamics * Kinetics * Equilibria. | * Periodicity * Electrochemistry * Study of the transition metals | * Studying the reactions of various homologous series, organic synthesis and chemical analysis. |

**Summer preparation**

The purpose of giving you a summer bridging task is:

1. To provide a bridge from level 2 to level 3 study, and lead into the early stages of the course.
2. To engage you in independent learning which is required at level 3.
3. To encourage you to develop your work ethic and commitment to study.
4. To measure your suitability for the course and assess your initial levels of achievement.

**Task 1**: There are a number of key terms that crop up throughout the two-year course. It is important that you are aware what the meaning is of these terms.

Define the following key terms:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Acid | Base | Buffer | Carbocation | Catalyst | Covalent bonding |
| Delocalisation | Displacement reaction | Electron density | Electronegativity | Electrophile | Enthalpy change |
| Free radical | Homologous series | Hydrolysis | Ionic bonding | Isomer | Lone pair |
| Maxwell-Boltzmann distribution | Metallic bonding | Molecular formula | Nucleons | Oxidation | Periodicity |
| Polar | Redox reaction | Reduction | Saturated hydrocarbon | Specific heat capacity | Spectator ion |
| Stereoisomer | Stoichiometry | Structural formula | Triglyceride | Van der waals forces | Weak acid |

**Further Tasks:**

**Please complete the following tasks. They can be done in any order:**

Please complete the following bridging unit provided by Oxford University Press, this covers all essential skills required for the A Level course.

<http://fdslive.oup.com/www.oup.com/oxed/secondary/science/Science_A_Level_Transition_Pack_Chemistry.pdf>

If you would like further work then you are able to download the CGP Head Start to Chemistry textbook for free at the moment from Amazon.

<https://www.amazon.co.uk/Head-Start-level-Chemistry-Level-ebook/dp/B00VE2NIGG/ref=sr_1_4?crid=EV5FZF0KCCDN&dchild=1&keywords=cgp+head+start+to+a+level&qid=1587551534&sprefix=cgp+Head+Start+to%2Caps%2C133&sr=8-4>

**Please bring your work with you to your first lesson.**

**Potentially useful websites:**

<https://chemrevise.org/revision-guides/>

<https://www.chemguide.co.uk/>

**Link to the Specification:**

<https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-7404-7405-SP-2015.PDF>