

Department Title: Chemistry

Exam Boards: OCR

Department Vision:

The Geography department aims to motivate and involve students in world issues both in their immediate vicinity and globally. Geographers are charged with the task of viewing the world through two lenses: one being geophysical—studying the topography and physical landscape of our angry earth and the other being socio-economic— learning about the intrinsic importance of society and understanding how economic change can shape our lives. Topics are widely diverse including the Antarctic, Development, Resource Management and Hot Deserts. Issues such as inequality, globalisation and urbanisation are discussed in the hope that students better understand the need for collective, global citizenry to preserve our beautiful planet. At every Key Stage we also use GIS to promote IT in the subject and to weave core skills into the fabric of our curriculum.

Year 7: Term 1

Topic 1
Topic 2
Topic 3

Assessment style (homework, end of topic test etc.)

Year 7: Term 2

Year 7: Term 3

Year 8: Term 1

Year 8: Term 2

Year 8: Term 3

Year 9: Term 1

- *Particles, atomic structures, isotopes*
- *Relative formula mass, Empirical formula*
- *Pure and impure substances, filtration, crystallisation, distillation, Revision and Tests*

Year 9: Term 2

- *Chromatography, purification*
- *Metals and non-metals, ions, ionic compounds,, Simple and giant molecules*
- *Polymers*
- *Revision and Tests*

Year 9: Term 3

- *Structures of metals, periodic table and trends,*
- *Chemistry of carbon,, properties of materials, nanoparticles,*
- *Revision and Tests*

Year 10: Term 1

- *Formula*
- *Chemical equations*
- *Moles and calculations*
- *Exothermic endothermic reactions*
- *Energy profiles*
- *Revision and Tests*

Year 10: Term 2

- *Energy changes calculations*
- *Redox reactions*
- *PH, and neutralization*
- *Reactions of acids and H⁺ ion*
- *Revision and Tests*
- *Chemistry of group 1, Revision and Tests*

Year 10: Term 3

- *Chemistry of Group 7*
- *Displacement reactions*
- *Noble gases*
- *Transition metals and reactivity*
- *Detections of gases and ions*
- *Analysis, Revision and Tests*

Year 11: Term 1

- *Theoretical and % yield*
- *Concentration and titrations*
- *Gas calculations*
- *Rate of reaction*
- *Factors affecting rate of reaction*
- *Revision and Tests*

Year 11: Term 2

- *Review of C1-C6*
- *Qs, Tests and past papers*
- *Revisions and Tests*

Year 11: Term 3

- *Study leave*

<p><i>Year 12: Term 1</i></p> <ul style="list-style-type: none"> • Modules 2.1.1– 2.1.11 (teacher A) • Modules 2.2.1-2.2.8 (teacher B) 	<p><i>Year 12: Term 2</i></p> <ul style="list-style-type: none"> • Modules 2.1.12-3.2.2 (teacher A) • Modules 2.2.9-.3.1.11 (teacher B) 	<p><i>Year 12: Term 3</i></p> <ul style="list-style-type: none"> • 3.2.3-3.2.12 (teacher A) • Module 4 (ALL) (teacher B)
<p><i>Year 13: Term 1</i></p> <ul style="list-style-type: none"> • 5.1.1– 5.1.7 (teacher A) • 6.1.1-6.1.11 (teacher B) • PAGs (Teacher A) 	<p><i>Year 13: Term 2</i></p> <ul style="list-style-type: none"> • 5.1.8-5.1.14 (teacher A) • 6.2.1-6.3.7, as well as ALL of 5.2 and 5.3 (teacher B) • PAGs (Teacher A) 	<p><i>Year 13: Term 3</i></p> <p>Revision/Study leave</p>

Assessment:

Students are regularly assessed on all topics covered during 5-7 weeks. Feedbacks are regularly given. Home works and quality of written work, research as well as Practical assessments closely monitored (both for GCSE and A-level students).

Predictions of student's grades are objectively arrived at based on assessments. Appropriate feedbacks will be provided to individual student, so their weaknesses turn to their strengths. Parental contacts are quite regular too.

Reading list/Useful websites:

OCR Chemistry A book 1 and 2 (for 1st year and 2nd year), will be given. Students are encouraged (at A-level), to read and research other resources, to broaden knowledge. Further resources will be sent to 'Show my Homework', as and when necessary.

Related Careers:

Chemistry is a subject that is needed to study a wide spectrum of areas from chemicals, chemicals engineering to all medicinal fields.