



## PLUME ACADEMY - LEARNING OVERVIEW

Year	10
Course	GCSE Chemistry
Specification Number/Exam Board	8462/AQA
End of course assessment and weightings	<ul style="list-style-type: none"><li>Two written exams: 1 hour 45 minutes each<ul style="list-style-type: none"><li>Foundation and Higher Tier<ul style="list-style-type: none"><li>100 marks each</li><li>50% of GCSE each</li></ul></li><li>Multiple choice, structured, closed short answer and open response</li></ul></li></ul> <p><b>Paper 1</b> Topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry, Chemical changes; and Energy changes</p> <p><b>Paper 2</b> Topics 6–10: The rate and extent of chemical change; Organic chemistry; Chemical analysis, Chemistry of the atmosphere; and Using resources</p>

### Prior Learning

The subject builds on your child's key stage 3 experience in science by building upon the 'bridging year' in year 9 where the basic foundations of GCSE are covered. All topics have been sequenced to build challenge.

### Curriculum Intent – What are the curriculum aims?

The GCSE specification in chemistry will enable students to:

- Develop scientific knowledge and conceptual understanding through chemistry
- Develop understanding of the nature, processes and methods of science through different types of scientific enquiries that help them to answer scientific questions about the world around them
- Develop and learn to apply observational, practical, modelling, enquiry and problem-solving skills, both in the laboratory, in the field and in other learning environments
- Develop their ability to evaluate claims based on chemistry through critical analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively.

### Curriculum Implementation – What will my child be learning?

Term 1	Half Term 1	Topic 6: The rate and extent of chemical change
	Half Term 2	Topic 2: Bonding, Structure and the Properties of Matter Topic 4 part 3: Chemical changes (Electrolysis)
Term 2	Half Term 3	Topic 3 Part 2: Chemical changes (Electrolysis)
	Half Term 4	Topic 3 Part Two: Quantitative chemistry
Term 3	Half Term 5	Topic 8: Chemical Analysis
	Half Term 6	Topic 10: The Earth's Resources



## Curriculum Impact – How will progress be assessed as I learn?

Formal Progress Review assessments  
Informal Standard Homeworks and Long answer questions  
Regular assessment and feedback in exercise books and verbally

## Super-Curricular Opportunities – Support and Extending Learning

Useful study resources	If a student is really passionate about this subject...	As a parent/carer, I can assist my child in this subject by:
<p>The <a href="#">BBC GCSE Bitesize website</a> covers all of the important topics that you need to know for your exams.</p> <p><a href="#">O2 Learn</a> a video-based resource.</p> <p><a href="#">GCSE Science</a> has some written notes covering important topics</p> <p><a href="#">Chemguide</a> written overviews of various topics</p> <p>The <a href="#">CGP books website</a> for quizzes and games</p> <p><a href="#">Creative Chemistry</a> for testing yourself on what you have learned</p> <p><a href="#">Chemistry Rules</a></p> <p><a href="#">Webelements</a> is an interactive Periodic Table</p> <p><a href="#">Periodic Videos</a>.</p> <p><a href="http://www.freesciencelessons.co.uk">www.freesciencelessons.co.uk</a></p> <p>The full specification can be found here: <a href="https://www.aqa.org.uk/subjects/science/gcse/chemistry-8462">https://www.aqa.org.uk/subjects/science/gcse/chemistry-8462</a></p>	<p>Students could get involved in raising awareness of issues contributing to pollution and climate change.</p> <p>Students could get involved in a drive to encourage recycling and reuse of metals to reduce pressure on reserves of metal ores.</p> <p>Various science podcasts (usually free) and magazines available to awareness of real world applications and innovations in chemistry</p>	<p>Purchase 9-1 GCSE Chemistry AQA Revision Question Cards</p> <p><a href="https://www.cgpbooks.co.uk/secondary-books/gcse/back-to-school-gcse/caf41-new-9-1-gcse-chemistry-aqa-revision-questions">https://www.cgpbooks.co.uk/secondary-books/gcse/back-to-school-gcse/caf41-new-9-1-gcse-chemistry-aqa-revision-questions</a></p> <p>Purchase revision workbook for students to work through throughout the course</p> <p><a href="https://www.cgpbooks.co.uk/secondary-books/gcse/science/chemistry/caf41-grade-9-1-gcse-chemistry-aqa-exam-practice-workbook">https://www.cgpbooks.co.uk/secondary-books/gcse/science/chemistry/caf41-grade-9-1-gcse-chemistry-aqa-exam-practice-workbook</a></p>