



PLUME ACADEMY - LEARNING OVERVIEW

Year	11
Course	Combined Science Trilogy
Specification Number/Exam Board	(8464)
End of course assessment and weightings	<p>Total of 6 exams, two in Biology, two in Chemistry and two in Physics Each paper is 1 hour 15 minutes</p> <ul style="list-style-type: none">• Foundation and Higher Tier• 70 marks <p>WHAT IS ON PAPERS 1 AND 2?</p> <p><u>Paper 1:</u> (Higher and Foundation)</p> <p>BIOLOGY:</p> <ul style="list-style-type: none">• Cell Biology• Organisation• Infection and Response• Bioenergetics <p>CHEMISTRY:</p> <ul style="list-style-type: none">• Atomic structure and the periodic table• Bonding, structure, and the properties of matter• Quantitative chemistry• Chemical changes• Energy changes <p>PHYSICS:</p> <ul style="list-style-type: none">• Energy• Electricity• Particle Model• Atomic Structure <p><u>Paper 2:</u> (Higher and Foundation)</p> <p>BIOLOGY:</p> <ol style="list-style-type: none">1. Homeostasis and response2. Inheritance, variation and evolution3. Ecology <p>CHEMISTRY:</p> <ul style="list-style-type: none">• The rate and extent of chemical change• Organic chemistry• Chemical analysis• Chemistry of the atmosphere <p>PHYSICS:</p>



	<ul style="list-style-type: none"> • Forces • Waves • Magnetism and Electromagnetism
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Prior Learning

We teach content from the basics to give a consolidated base for all students to progress forward into their Key Stage 4 topics and concepts spiralling back and building on previous taught work. Topics considered to be more challenging are delivered in year 11.

Curriculum Intent – What are the curriculum aims?

- Develop scientific knowledge and conceptual understanding through all three sciences
- 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 all three sciences 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	Biology: Cell transport and Plant processes Topic 1: Atomic Structure review Physics: Forces Part B
	Half Term 2	Biology: Respiration and inheritance Chemistry: Energy changes Physics: Magnetism and Electromagnetism Part A
Term 2	Half Term 3	Biology: Classification Chemistry: Rate and extent of chemical change Physics: Magnetism and Electromagnetism Part B
	Half Term 4	Biology: Revision/Required practicals Chemistry: Chemical analysis Physics: Revision/Required practicals
Term 3	Half Term 5	Exam Revision and Exams start
	Half Term 6	

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

Mock Exams in half term 2 and half term 4
Key Knowledge Organiser Assessments
Standard Homework Tasks-Past exam paper questions
Regular exercise book assessment and feedback



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:
<ul style="list-style-type: none">• GCSE Bitesize• Seneca Learning• Oak National Academy• Youtube-sites such as Fuse School, Cognit, Free GCSE Science• Revision guides for AQA Combined Science Trilogy. CGP are the publishers we would recommend.	<ul style="list-style-type: none">• Watch TV documentaries (e.g. BBC iplayer)• Listen to BBC Sounds podcasts on Science related issues	<p>Encourage students to revise work on a weekly or fortnightly basis using their books and/or Youtube videos to check their understanding.</p> <p>From the January before the final exams, encourage students to draw up a revision timetable to aid their preparation.</p>