

STMLC

Year Group 10

Subject: Combined science

Exam board and specification: AQA 8464 Trilogy

Autumn Term 1	<p><u>Photosynthesis/respiration.</u> Understanding the role of photosynthesis in plants and learning that respiration is one of the most important processes in living cells.</p> <p><u>Chemical changes /C4 chemical calculations</u> Developing an understanding of the reactivity series, the structure of atoms and sub-atomic particles to work out relative atomic mass and relative formula mass.</p>
Autumn Term 2	<p><u>Electrical circuits</u> Investigating and analysing series and parallel circuits, static electricity and direct and alternating currents.</p> <p>Describing the UK mains supply, the wires used within it and the National Grid.</p> <p><u>Communicable diseases/ preventing disease</u> Understanding the different pathogens that can cause communicable disease and the prevention of disease by vaccination.</p> <p><u>Electrolysis</u> Describe the process of electrolysis.</p>
Spring Term 3	<p><u>Molecules and matter.</u> Understanding the concept of density and internal energy.</p> <p><u>Non-communicable diseases</u> Understanding what is meant by the risk factors for a disease.</p> <p><u>Energy change.</u> Examining the energy transfers that occur during chemical reactions.</p> <p><u>Nervous system</u> Understanding the structure and functions of the human nervous system.</p>
Spring Term 4	<p><u>Radioactivity.</u> Describing the changes in the nucleus which occur during alpha, beta, and gamma decay , the concepts of activity, and the patterns in radioactive decay.</p> <p><u>The Earth's atmosphere/The Earths resources</u> Understanding the Earth's atmosphere and its history and the difference between finite and renewable resources.</p>
Summer Term 5	<p><u>Ecology/Ecosystem/Biodiversity.</u> Understanding communities, environments, adaptations, competition in animals and plants, how feeding relationships are represented in food chains.</p>
Summer Term 6	<p><u>Forces and motion</u> Analysing the motion of objects using graphs; determining the relationships between a force acting on an object and the acceleration</p>
Home learning	Students are set a variety of homework tasks including worksheets, research tasks and online tasks on kerboodle. Students are also expected to revise regularly to ensure they are ready for end of topic tests.
One thing to do	Complete the questions in your workbook and mark your own work. Use this to identify areas that need further work.
How technology can support you	Online tailored resources from kerboodle are available to support with your learning. Use websites that condense the AQA Science units into 20 minute videos
By the end of KS4 you will be able to	Make informed decisions about some of the issues in Science and technology, such as the use of stem cells and nanotechnology.

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