



# Long Term Plan

IGCSE Single Science



2021-2022	Autumn 1 7 weeks	Autumn 2 7 weeks	Spring 1 7 weeks	Spring 2 7 weeks	Summer 7 weeks
Year 10	<p><b>The Nature and Variety of living organisms</b></p> <ul style="list-style-type: none"> <li>The characteristics of Living Organisms and their Variety</li> </ul> <p><b>Structure and Function in Living Organisms</b></p> <ul style="list-style-type: none"> <li>Levels Of Organisation and cell structure</li> <li>Biological molecules</li> <li>Movement of substances into and out of cells</li> <li>Nutrition</li> </ul>	<p><b>Structure and Function in Living Organisms</b></p> <ul style="list-style-type: none"> <li>Respiration</li> <li>Gas Exchange</li> <li>Transport</li> </ul> <p><b>Principles of Chemistry</b></p> <ul style="list-style-type: none"> <li>States of matter</li> <li>Elements, Compounds and Mixtures</li> <li>Atomic structure</li> </ul>	<p><b>Principles of Chemistry</b></p> <ul style="list-style-type: none"> <li>The periodic Table</li> <li>Chemical formulae and equations</li> <li>Ionic bonding</li> <li>Covalent bonding</li> </ul> <p><b>Inorganic Chemistry</b></p> <ul style="list-style-type: none"> <li>Group 1</li> <li>Group 7</li> <li>Gases in the atmosphere</li> </ul>	<p><b>Inorganic Chemistry</b></p> <ul style="list-style-type: none"> <li>Reactivity series</li> <li>Acids and alkalis</li> <li>Chemical tests</li> </ul> <p><b>Forces and motion</b></p> <ul style="list-style-type: none"> <li>Movement and position</li> <li>Forces and shape</li> <li>Forces and movement</li> </ul>	<p><b>Electricity</b></p> <ul style="list-style-type: none"> <li>Mains Electricity</li> <li>Current and Voltage in circuits</li> <li>Electrical resistance</li> </ul> <p><b>Waves</b></p> <ul style="list-style-type: none"> <li>Properties of waves</li> <li>The electromagnetic spectrum</li> <li>Light and sound waves</li> </ul>
Year 11	<p><b>Reproduction and inheritance</b></p> <ul style="list-style-type: none"> <li>Reproduction</li> <li>Inheritance</li> </ul> <p><b>Ecology and the Environment</b></p> <ul style="list-style-type: none"> <li>The organism in the environment</li> <li>Feeding relationships and cycles within ecosystems</li> </ul> <p><b>Use of Biological resources</b></p> <ul style="list-style-type: none"> <li>Food Production</li> <li>Genetic modification</li> </ul>	<p><b>Physical Chemistry</b></p> <ul style="list-style-type: none"> <li>Energetics</li> <li>Rates of reaction</li> </ul> <p><b>Organic Chemistry</b></p> <ul style="list-style-type: none"> <li>Introduction</li> <li>Crude oil</li> <li>Alkanes</li> <li>Alkenes</li> <li>Synthetic Polymers</li> </ul>	<p><b>Energy resources and energy transfer</b></p> <ul style="list-style-type: none"> <li>Energy Transfers</li> <li>Work and Power</li> </ul> <p><b>Solids, Liquids and gases</b></p> <ul style="list-style-type: none"> <li>Pressure</li> <li>Solids, Liquids and gases</li> </ul> <p><b>Magnetism and Electromagnetism</b></p> <ul style="list-style-type: none"> <li>Magnetism and Electromagnetism</li> <li>Electric Motors</li> </ul>	<p><b>Radioactivity and Particles</b></p> <ul style="list-style-type: none"> <li>Atoms and radioactivity</li> <li>Radiation and half-life</li> <li>Applications of radioactivity</li> <li>Fission and Fusion</li> </ul> <p><b>Astrophysics</b></p> <ul style="list-style-type: none"> <li>Motion in the Universe</li> <li>Stellar Evolution</li> </ul>	<p><b>Revision for external exams</b></p>