



Science					
	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	<p>Cells - animal and plant cell parts and structure. Microscopes, Organs and organ systems</p> <p>Solar system - day/night, moon, what is a year, solar system</p>	<p>Food and digestion - food tests, nutrient groups, obesity</p> <p>Respiration - equation, aerobic, links to digestion</p>	<p>Inheritance - DNA, genetic vs environmental inheritance, genetic illnesses, genetic testing</p> <p>Fit and healthy - drugs, alcohol, diet, smoking</p>	<p>BTEC principles of Applied Science Unit 2 Chemistry and the Earth</p> <p>LA A – Chemical bonding and reactivity</p> <p>LA B - Useful chemical products</p>	<p>BTEC principles of Applied science Unit 1 – Principles of science</p> <p>explore the importance of energy stores, energy transfers and energy transformations</p>
Autumn 2	<p>Acids/alkalis - acids and alkalis, pH scale, indicators, neutralisation</p> <p>Energy resources - fossil fuels, renewable and non-renewable resources</p>	<p>Atom and elements - periodic table and element names and symbols. Patterns in the table</p> <p>Heating and cooling - conduction, convection and radiation</p>	<p>Speeding up - calculating speed, acceleration, effect of forces on speed</p> <p>distance/time graphs</p>	<p>BTEC principles of Applied Science Unit 2 Chemistry and the Earth</p> <p>LA C – Controlling industrial reactions</p> <p>LA D – Affecting the environment</p>	<p>BTEC principles of Applied Science Unit 4 - Biology and the environment</p> <p>LA A – Is survival in the genes</p>
Spring 1	<p>Simple chemical reactions - physical and chemical changes, basic chemical reactions</p> <p>Forces and their effects - contact and noncontact</p>	<p>Compounds and mixtures - formulae, separating mixtures, particle diagrams</p> <p>Light - reflection, refraction, luminous, colours</p>	<p>Energy and electricity - national grid, energy types and energy transfers. Efficiency</p> <p>Patterns of reactivity - acids and metal reactions and naming salts.</p> <p>Reactivity series</p>	<p>BTEC principles of Applied Science Unit 3 – Physics and the universe</p> <p>LA A – Ionising radiation</p>	<p>BTEC principles of Applied Science Unit 4 - Biology and the environment</p> <p>LA B – How polluted is the environment</p>



	forces, effect of forces on motion				
Spring 2	<p>Simple chemical reactions - physical and chemical changes, basic chemical reactions</p> <p>Particle model - solids, liquids, gases, change of state</p>	<p>Microbes and disease - bacteria and viruses, vaccinations, infection prevention</p> <p>Rocks and weathering - types of rock and their formation, types and examples of weathering, erosion</p>	<p>Environmental chemistry - soil testing, farming, use of fertilisers, polymers, composite sand ceramics</p> <p>Gravity and space - telescopes, exploring the universe. Calculating density</p>	<p>BTEC principles of Applied Science Unit 3 – Physics and the universe LA B – Generating electricity</p>	<p>BTEC principles of Applied Science Unit 4 - Biology and the environment LA C –Prevention or cure</p>
Summer 1	<p>Environment and feeding relationships - basic food chains, consumers and producers</p> <p>Simple circuits - circuit components, series and parallel circuits, measuring current and voltage</p>	<p>Magnets - magnetism, poles, electromagnets</p> <p>Ecological relationships - classification groups, food webs and interdependence, sampling</p>	<p>Begin KS4 curriculum</p> <p>BTEC principles of Applied science Unit 1 – Principles of science explore cells, organs and genes explore the roles of the nervous and endocrine systems in homeostasis and communication</p>	<p>BTEC principles of Applied Science Unit 3 – Physics and the universe LA C –The final frontier</p>	<p>BTEC principles of Applied science Unit 1 – Principles of science Explore substances and chemical reactions explore the properties and applications of waves in the electromagnetic spectrum</p>
Summer 2	<p>Variation and classification - habitats, adaptations, extinction</p> <p>Reproduction - structure and function of reproductive systems,</p>	<p>Sound - auditory ranges, waves</p> <p>Rock cycle - how rock types are intertwined</p>		<p>BTEC principles of Applied science Unit 1 – Principles of science explore atomic structure and the periodic table</p>	<p>External examination – BTEC Principles of Applied Science</p>



	<i>menstrua cycle, foetal development</i>				
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