## Single Science AQA

## YEAR ELEVEN

	Unit title	Learning objectives	Assessment and Assignments
TERM 1	B1.4Interdependence and Adaptation	<ul> <li>suggest how organisms are adapted to the conditions in which they live</li> <li>observe the adaptations, eg body shape, of a range of organisms from different habitats</li> <li>develop an understanding of the ways in which adaptations enable organisms to survive</li> <li>suggest the factors for which organisms are competing in a given habitat</li> <li>evaluate data concerned with the effect of environmental changes on the distribution and and behaviour of living organisms.</li> </ul>	End of Unit modules Tests. ISAs. Mock exam. GCSE exams.
	B1.5 Energy and Food Chains	interpret pyramids of biomass and construct them from appropriate information.	
	B1.6 Waste materials from plants and Animals	evaluate the necessity and effectiveness of schemes for recycling organic kitchen or garden waste.	
	B1.7 Genetic Variation and it's control	<ul> <li>interpret information about cloning techniques and genetic engineering techniques</li> <li>make informed judgements about the economic, social and ethical issues concerning cloning and genetic engineering, including genetically modified (GM) crops.</li> </ul>	
	B1.8 Evolution	<ul> <li>interpret evidence relating to evolutionary theory</li> <li>suggest reasons why Darwin's theory of natural selection was only gradually accepted</li> <li>identify the differences between Darwin's theory of evolution and conflicting theories, such as that of Lamarck</li> <li>suggest reasons for the different theories.</li> </ul>	
TERM 2	C1.5 Other useful substances from crude oil	<ul> <li>evaluate the social and economic advantages and disadvantages of using products from crude oil as fuels or as raw materials for plastics and other chemicals</li> <li>evaluate the social, economic and environmental impacts of the uses, disposal and recycling of polymers</li> <li>evaluate the advantages and disadvantages of making ethanol from renewable and non-renewable</li> </ul>	

		sources.	
	C1.6 Plant oils and their uses  C1.7 Changes in the Earth and it's Atmosphere	<ul> <li>evaluate the effects of using vegetable oils in foods and the impacts on diet and health</li> <li>evaluate the use, benefits, drawbacks and risks of emulsifiers in foods.</li> <li>recognise that the Earth's crust, the atmosphere and the oceans are the only source of minerals and other resources that humans need</li> <li>explain why Wegener's theory of crustal movement (continental drift) was not generally accepted for many years</li> </ul>	
		<ul> <li>explain why scientists cannot accurately predict when earthquakes and volcanic eruptions will occur</li> <li>explain and evaluate theories of the changes that have occurred and are occurring in the Earth's atmosphere</li> <li>explain and evaluate the effects of human activities on the atmosphere</li> <li>describe why we do not know how life was first formed.</li> </ul>	
TERM 3	P1.4 Methods we use to generate electricity	<ul> <li>evaluate different methods of generating electricity</li> <li>evaluate ways of matching supply with demand,</li> <li>either by increasing supply or decreasing demand</li> <li>compare the advantages and disadvantages of overhead power lines and underground cables.</li> </ul>	
	P1.5 The use of waves for communication and to provide evidence that the universe is expanding	<ul> <li>compare the use of different types of waves for communication</li> <li>evaluate the possible risks involving the use of mobile phones</li> <li>consider the limitations of the model that scientists use to explain how the universe began and why the universe continues to expand.</li> </ul>	