



Science Long Term Overview

KS4- ELC 1 Year Course

2021-2022

Autumn 1	1st Sep 21	6th Sep 21	13th Sep 21	20th Sep 21	27th Sep 21	4th Oct 21	11th Oct 21	18th Oct 21	
	<i>Baselines</i>	<i>Biology- The Human Body</i>							
		What is the body made of?				How the body works			
		Cell structure/cell specialism	Tissues/Organs	The circulatory system	The digestive system	Respiration	Healthy and unhealthy lifestyles	Exercise	
Autumn 2	1st Nov 21	8th Nov 21	15th Nov 21	22nd Nov 21	29th Nov 21	6th Dec 21	13th Dec 21		
	<i>Biology- The Human Body</i>								
	How the body fights diseases				How the body is co-ordinated				
	Infectious diseases	White blood cells	Vaccinations	Medical drug testing/ antibiotics	Automatic response systems	Reflex actions	Hormones/ controlling fertility		
Spring 1	4th Jan 22	10th Jan 22	17th Jan 22	24th Jan 22	31st Jan 22	7th Feb 22	14th Feb 22		
	<i>Physics- Energy, Forces and the Structure of matter</i>								
	Energy, energy transfers and energy resources			Forces and work		Speed and stopping distances			
	Energy stores/ energy transfers	Energy efficiency/ thermal conductivity	Renewable and non-renewable energy resources	Contact and non-contact forces	Work done	Speed/ stopping distances	Reaction time/ breaking distances		
Spring 2	28th Feb 22	7th Mar 22	14th Mar 22	21st Mar 22	28th Mar 22	4th Apr 22			
	<i>Physics cont.</i>	<i>Chemistry-Elements, Mixtures and Compounds</i>							
	Atoms and nuclear radiation	Atoms, elements and compounds		How structure affects properties	Separating Mixtures				
	Alpha, beta and gamma radiation	Atoms and elements/ elements and compounds	Word equations	States of matter/ diamond and graphite	Mixtures	Chromatography			

Summer 1	25th Apr 22	2nd May 22	9th May 22	16th May 22	23rd May 22			
	<i>Chemistry cont.</i>			<i>Biology- Ecology</i>				
	Metals and ores		Polymers	Adaptations, interdependence and competition				
	Unreactive metals and metal ores/recycling metals	Properties of metals/ alloys	Polymer examples and properties	Communities	Biotic and abiotic factors			
Summer 2	6th Jun 22	13th Jun 22	20th Jun 22	27th Jun 22	4th Jul 22	11th Jul 22	18th Jul 22	
	<i>Biology cont.</i>							
	cont.	Organisation of an ecosystem	Trophic levels in an ecosystem			How materials are recycled		
	Adaptations	Levels of organisation	Producers, consumers and decomposers	Trophic levels and pyramids of biomass	Food chains	The water cycle	Decay and carbon cycles	