



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	<p>Prior to year 10, students study all sciences in a blended approach. The route below is only for those students who select to study the triple science route.</p>					
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10	Atomic Structure and the periodic table	Bonding Structure and the properties of matter	Energy Changes, Quantitative chemistry	Quantitative Chemistry	Chemical Changes	Chemical Changes
11	The rate and extent of chemical change	Organic chemistry	Chemical Analysis and Using Resources	Using Resources Revision of Content	Exam preparation	
12	Atomic Structure Amount of Substance	Energetics	Kinetics Chemical Equilibria, Le Chatelier's principle and K_c	Chemical Equilibria, Le Chatelier's principle and K_c Oxidation, Reduction and Redox Reactions	Periodicity Group 2 Group 7	Revision of physical and inorganic chemistry
	Bonding	Bonding. Introduction to Organic Chemistry	Alkanes Halogenoalkanes Alkenes	Alkenes Alcohols	Organic Analysis	Revision of organic chemistry
13	Thermodynamics Rate Equations	K_p for homogenous systems Electrode potentials and electrochemical cells	Acids and bases Properties of period 3 and their oxides Transition metals	Transition metals Reactions of ions in aqueous solution.	Exam Preparation	
	Optical Isomers Aldehydes and Ketones Carboxylic Acids and their derivatives.	Carboxylic Acids and their derivatives. Aromatic Chemistry Amines and Amides	Polymers Amino Acids, Proteins and DNA	Organic Synthesis NMR Chromatography		
<p>Curriculum Rationale: In science at Barr Beacon School, we intend to send pupils out into the world knowing how it works. Our science curriculum provides pupils with the scientific knowledge and experiences which will interest them in the scientific world. We aim to empower them to thrive in a scientific workplace or work outside of science with a greater understanding of the world around them. A greater knowledge of how the world around them works will also allow them to make more informed contributions to our democratic society during their life at Barr Beacon and beyond.</p>						