



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>10</b>	Atomic Structure	Bonding	Energy Changes	Quantitative Chemistry	Chemical Changes (Part A)	Chemical Changes (Part B)
<b>11</b>	Rates of Reaction	Organic Chemistry	Using our resources	Chemistry of the atmosphere Chemical Analysis	Revision	
<b>12</b>	Atomic Structure Bonding Redox	Amount of Substance Introduction to organic Periodicity	Energetics Alkanes Group 2 and Group 7	Kinetics Halogenoalkanes Equilibria Period 3	Alkenes and Alcohols Equilibria	Transition Metals Organic Analysis Period 3
<b>13</b>	Thermodynamics Optical isomerism and Carbonyl Chemistry	Rate Equations and $K_p$ Carboxylic Acids and their derivatives	Electrode Potentials	Acids Bases and pH Chromatography	Amines and amides Polymers Amino acids and DNA	Organic Synthesis NMR

**Curriculum Rational:** The Science Curriculum at Barr Beacon School is designed to provide pupils with relevant knowledge to enable them to be scientifically literate members of society. In our rapidly changing world, where new and emerging technologies present ethical challenge to our democratic society, we will empower pupils with relevant knowledge to effectively question information and make informed contributions. Even given infinite time, we could not hope to fully explain all the contributions science makes to the world around us, we have developed our curriculum to build interest and promote curiosity in the applications of science.