

Subject: Chemistry Year: 10 Ability: All
Separate Science



Dates	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
Topic	Quantitative Chemistry	Chemical Changes	Energy Changes	The Rate and Extent of Chemical Change	Organic Chemistry (1st half) + revision.	Organic Chemistry (2nd half) + mock exam
Topic overview Students will learn...	How to apply chemical measurements, the conservation of mass and the quantitative interpretation of chemical equations to unfamiliar situations.	How to predict the products of specific and unfamiliar chemical reactions in the context of oxidation, reduction and redox. How to carry out chemical reactions including electrolysis, titrations, and the formation of salts.	How exothermic and endothermic reactions influence the temperature of the surroundings. How energy changes in a chemical reaction can be measured practically.	How the particle model and collision theory can be used to explain changes in rate How variables can influence changes in reversible reactions How rates of reaction can be measured practically	How to explain how crude oil is formed, separated, and used. How hydrocarbons react and behave.	Develop a knowledge and understanding of alkenes, alcohols and carboxylic acid and how they react. Develop an understanding of addition, condensation and natural polymers.