Bishop Heber High School

Subject	Year	Term
Chemistry	12	2

Topic

Physical, Inorganic and Organic Chemistry

Content (Intent)

Prior Learning (Topic) Physical, Inorganic and Organic Chemistry

AQA A Level Chemistry

- Physical Chemistry – Energetics, Kinetics, Chemical Equilibria, Le Chatelier's principle and Kc
- Organic Chemistry – Alkanes, Alkenes, Halogenoalkanes and Alcohols
- Inorganic Chemistry – Oxidation, Reduction and Redox equations

Future Learning (Topic) Physical, Inorganic and Organic Chemistry

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
Physical Chemistry 1. Energetics 2. Kinetics 3. Chemical Equilibria, Le Chatelier's principle and Kc **Organic Chemistry** 1. Alkanes 2. Alkenes **Required practical 2** - Measurement of an enthalpy change. **Required practical 3** - Investigation of how the rate of a reaction changes with temperature.	End of topic tests - A level grading and formative feedback given. Summative Assessment 2 in year 12 and summative assessment 1 and 2 in year 13.. A level grading and formative feedback given. Homework – a percentage, A level grade and Formative feedback provided.
Inorganic Chemistry 1. Oxidation, reduction and redox equations **Organic Chemistry** 1. Halogenoalkanes 2. Alcohols **Required practical 5** - Distillation of a product from a reaction.	End of topic tests - A level grading and formative feedback given. Spring Mock Exam - A level grading and formative feedback given. Homework – a percentage, A level grade and Formative feedback provided.

How can parents help at home

Ensure all class notes and content files are complete and homework submitted on time
Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.
Encourage pupils to actively research future University courses and careers.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

Text Book - CGP New A-Level Chemistry for AQA: Year 1 & 2

Websites

- A-levelchemistry.co.uk
- ChemGuide.co.uk (written by Jim Clark)
- KnockHardy
- AQA website

Books – Calculations in AS/A level Chemistry by Jim Clark
Essential Maths Skills for A- Level Chemistry – CGP

UPLEARN

Vocabulary Lists

Alkanes
Alkenes
Halogenoalkanes
Nucleophile
Electrophile
Nucleophilic Substitution
Free Radical Substitution
Electrophilic Addition
Mechanism
Aldehydes
Ketones
Amines
Carbocation
Equilibria
Le Chatelier's Principle
Maxwell Boltzmann
Elimination