Bishop Heber High School

Subject	Year	Term
Combined Science	11	1

Topic

Chemistry - Electrolysis (Unit 4), Energy Changes (Unit 5), Rates and Equilibria (Unit 6), Organic Chemistry (Unit 7)

Content (Intent)

Prior Learning (Topic) Chemistry - Chemical Changes (Unit 4), Energy Changes (Unit 5)

AQA GCSE Combined Science

- Unit 4 Chemical Changes – Electrolysis
- Unit 5 Exothermic and Endothermic Reactions
- Unit 6 Rates review and Reversible reactions
- Unit 7 Organic Chemistry - Hydrocarbons

Future Learning (Topic) Chemistry - Chemical Analysis (Unit 8), Atmospheric Changes (Unit 9), Using Resources (Unit 10)

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
Unit 4 Chemical Changes - Electrolysis Electrolysis of compounds and the extraction of Aluminium from its ore using electrolysis. **Unit 5 Energy Changes** Exothermic and Endothermic reactions energy profile diagrams and definitions. Energy changes calculations. Required practical 'investigate the energy changes in a reaction'	**Key Piece of work (Homework)** Pupils given a percentage and formative feedback provided. **End of topic test** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. **October Mock Exams** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.
Unit 6 Rates and Equilibria Review Collision theory, rate calculations and graph skills. Show how some reactions are reversible depending on conditions. **Unit 7 Organic Chemistry** To study hydrocarbons, their production and uses. Including Crude oil, Alkanes, Alkenes, Fractional Distillation, Cracking, Properties of Hydrocarbons	**Key Piece of work (Homework)** Pupils given a percentage and formative feedback provided. **End of topic test** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.

How can parents help at home?

Ensure all class booklets are complete and homework submitted on time
Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.
Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.
Ensure all pupils have all their resources required for science lessons, including booklets, pens and calculators

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

Reading
AQA revision guides
AQA revision cards
EDUCAKE online learning platform.
GCSE POD

Vocabulary Lists
Alkanes
Alkenes
Cracking
Fractional Distillation
Viscosity
Electrolysis
Anions
Cations
Equilibrium
Exothermic
Endothermic
Activation Energy
Collision Theory
Cathode
Anion