Bishop Heber High School

Subject	Year	Term
Chemistry	10	3

Topic

Chemical Changes (Unit 4), Energy Changes (Unit 5)

Content (Intent)

Prior Learning (Topic) Bonding (Unit 2), Quantitative Chemistry (Unit 3)

AQA GCSE Chemistry

- Unit 4 – Reactivity and Extraction of Metals, Acids and their reactions, Electrolysis
- Unit 5 – Exothermic and Endothermic Reactions, Chemical Cells and Fuel Cells.

Future Learning (Topic) Organic Chemistry (Unit 7), Chemical Analysis (Unit 8)

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
Unit 4 Chemical Changes Reactivity of Metals, the reactivity series, redox, Metal Extraction. Reactivity of Acids: the products with metals, bases, alkalis and metal carbonates. Neutralisation and titrations. Electrolysis of compounds and the extraction of Aluminium from its ore using electrolysis. Required Practical 'Preparation of a dry soluble salt' Required Practical 'Titration and Volume determination'	**Key Piece of work (Homework)** Pupils given a percentage and formative feedback. **End of topic test** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. **Walking talking Mocks (WTM)** Formative feedback provided. **Yr 10 Mock Exams** Pupils given a percentage and GCSE equivalent grade.
Unit 5 Energy Changes Exothermic and Endothermic reactions energy profile diagrams and definitions. Energy changes calculations. Creating and analysing Chemical Cells. Recalling equations including half equations for Fuel Cells. Required practical 'investigate the energy changes in a reaction'	**Key Piece of work (Homework)** Pupils given a percentage and formative feedback. **End of topic test** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. **Walking talking Mocks (WTM)** Formative feedback provided. **Yr 10 Mock Exams** Pupils given a percentage and GCSE equivalent grade.

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 Knowledge organisers, 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
BHHS Knowledge organisers

Vocabulary Lists

Electrolyte
Electrode
Rechargeable Cells
Non-Rechargeable Cells
Redox
Anions
Cations
Exothermic Reaction
Endothermic Reaction
Activation Energy
Chemical Cells
Fuel Cells
Hydrogen Fuel Cell
Equilibrium