Bishop Heber High School

Subject	Year	Term
Chemistry	10	3

Topic

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

Future Learning (Topic) Chemistry - Rates of a chemical reaction and Equilibria (Unit 6), Organic Chemistry (Unit 7)

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' **<u>Interleaving topic</u>** **Unit 2- Bonding,** Key Terms, concept, will be reviewed prior to the start of the Unit 5 Energy Changes	**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. **Year 10 Assessment 2, Year 11 Assessments 1 and 2** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided
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. **Year 11 Assessments 1 and 2** 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 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
Seneca Learning

Vocabulary Lists

Rechargeable Cells
Non-Rechargeable Cells
Exothermic Reaction
Endothermic Reaction
Activation Energy
Chemical Cells
Fuel Cells
Hydrogen Fuel Cell