Bishop Heber High School

| Subject | Year | Term |
|---|---|---|
| Chemistry | 9 | 1 |

## Topic

## Chemistry – Reactivity of Metals, Acids and their Reactions

### Content (Intent)

**Prior Learning (Topic)** Chemistry - Earth & Atmosphere

Students will have learnt SKILLS such as balancing equations, performing practicals safely and choosing their equipment based on the required outcomes of an experiment.
Students will have learnt and built upon their KNOWLEDGE about the concepts of chemical symbols, the periodic table, formulae for elements and compounds. conservation of mass, changes of state and chemical reactions.
Students will have UNDERSTOOD the concept of atoms, elements, compounds and mixtures and the many methods by which they can be separated physically or chemically. Students will understand the need for the periodic table as a basis for all formulae.

**Future Learning (Topic)** Chemistry – Chemical Analysis

| What Knowledge and Skills will be taught (Implementation) | How will your understanding be assessed & recorded (Impact) |
|---|---|
| **Knowledge –** to recall the reactivity series of metals and to apply this to displacement reactions. To recall extraction methods of metals from their ores. To identify oxidation, reduction reactions. To practise the application of writing and balancing chemical equations.<br>**Practical Skills** – To study and make observations during practicals when reviewing displacement reactions. | **Key Piece of work (Homework)**<br>Pupils given a percentage and formative feedback provided for a targeted piece of homework so that they can respond to the teacher and make progress in the topic. |
| **Knowledge –** to recall the chemical formula of common acids. To determine the products of neutralisation from reactions of acids with bases/alkali's and metals carbonates, plus the products of metals reacting with acids. To practise the application of writing and balancing chemical equations. To recall the pH scale with reference to universal indicator.<br><br>**Practical Skills** – All Pupils to perform the Required Practical 'Preparation of a dry soluble salt'<br>Triple only – Required Practical , determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration. | **Key Piece of work (Homework)**<br>Pupils given a percentage and formative feedback provided for a targeted piece of homework so that they can respond to the teacher and make progress in the topic.<br>**End of topic test**<br>Pupils given a percentage, formative feedback and GCSE equivalent grade. Formative feedback provided.<br>**Year 9 end of year exams**<br>Pupils given a percentage, formative feedback 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 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**
Reactivity Series
Oxidation
Reduction
Titration