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| **What will we be learning?**  **C4 – Chemical Changes** | **Why this? Why now?**  Previous learning – Atomic structure, Bonding and Structure  **What other GCSE Science units does this unit relate to?**  Chemistry – Atomic Structure, Bonding and Structure, Quantitative, Energy Changes  Biology – Digestion, Bioenergetics, Homeostasis,  Physics – Electricity | **Key Words:**  Metal  Reactivity series  Oxidation  Reduction  Redox  Displacement  Ore  Acid  Alkali  Aqueous  pH  Neutralisation  Salt  Strong  Weak  Electrolysis  Electrolyte  Inert electrode  Anode  Cathode  Discharge |
| **What will we learn?**   * Reactivity of metals * Reactions of acids * Electrolysis   **Required Practicals in this topic**   * Preparation of a pure, dry sample of a salt * Electrolysis of aqueous solution * Titration to find the concentration of an unknown solution (CHEMISTRY only)   **Useful equations/formulae/maths skills for this unit:**  OIL RIG  PANiC  pH is a logarithmic scale    **Misconceptions in this topic**  Concentrated/Dilute is not the same as Strong/Weak  Acids are not more dangerous than alkalis  Ions can conduct electrical current | |
| **What opportunities are there for wider study?**  **If you are interested in this unit, what careers does it relate to?**  Flavourist Toxicologist Sustainability Chemist  Sports Science Solar Lab technician Teacher  **Collins Revision guide relevant pages for this unit:**  Foundation – P112-117, P128-129, P146-147  Higher – P114-118, P132-133, P150-151  Separate – P38-42, P54-55, P76-77 | |
| **How will I be assessed?**  End of topic assessment | |