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| **What will we be learning?**  **Earth’s Resources** | **Why this? Why now?**  Previous Learning  Metals & Non-metals, Separating mixtures, Chemical Energy  Future Learning  GCSE – Using Resources, Ecology, Chemical Changes  A Level – Physical Chemistry & Transition Elements  Enquiry Processes  Use observations to draw conclusions. Evaluate extraction methods using data. | **Key Words:**  Resource  Mineral  Ore  Recycling  Extraction  Electrolysis  Displacement  Reactivity  Alternative  Industrial  Properties  Exothermic  Reduction  Oxidation |
| **What will we learn?**  **We will learn to write word and balanced symbol equations for the extraction of metals**  **We will be able to describe the different methods used to extract ores and justify why different methods are used based on a metal’s reactivity.**  **We will also learn how by changing behaviours and by using alternative resources we will be able to limit the consumption of natural resources.**  **Misconceptions in this topic**  **It is not acceptable to write ‘carbon oxide’. You must write ’carbon dioxide’.**  **Remember that ‘reduction’ is the loss of oxygen and ‘oxidation’ is the gain of oxygen. Use these words correctly.**  **Ensure that element symbols start with a capital letter.** | |
| **What opportunities are there for wider study?**  **Careers**: Metallurgist, Metals and Mining Analyst, Recycling Operations Manager, Piping Engineer  STE(A)M  https://highcliffe.sharepoint.com/sites/LearnSTEM | |
| **How will I be assessed?**  **End of Topic Test** | |