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| **What will we be learning?**  Chemical Energy  C:\Users\schapman\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\C996822D.tmp | **Why this? Why now?**  Previous Learning  Particle Model, Acids and Alkalis, Metals and Non-Metals  Future Learning  Elements  GCSE – Rate of Chemical Change, Energy Changes  Enquiry Processes  Analyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Plan variables | **Key Words:**  Activation Energy  Bond Breaking  Bond Making  Catalyst  Chemical Bond  Endothermic  Exothermic |
| **What will we learn?**   * How chemical bonds are broken and formed in chemical reactions * How to use observations to identify if a reaction is exothermic or endothermic * How to plan and test a hypothesis * How to draw energy level diagrams to explain observations * Use energy data to select and justify why you would use a particular cool pack/hand warmer.   **Misconceptions in this topic**   * The particle model – specifically the model for a liquid * Melting/freezing and boiling/condensing are often only understood in terms of water * Conservation of mass in terms of particles not being created or destroyed * Bonds have to be both broken and formed in a chemical reaction | |
| **What opportunities are there for wider study?**  Careers  Engineer Sports Science Reactor Physicist Lab technician  STE(A)M  https://highcliffe.sharepoint.com/sites/LearnSTEM | |
| **How will I be assessed?**  End of topic assessment | |