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| **What will we be learning?**Chemical EnergyC:\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-MetalsFuture Learning ElementsGCSE – Rate of Chemical Change, Energy ChangesEnquiry ProcessesAnalyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Plan variables | **Key Words:**Activation EnergyBond BreakingBond Making CatalystChemical BondEndothermicExothermic |
| **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
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| **What opportunities are there for wider study?**CareersEngineer Sports Science Reactor Physicist Lab technicianSTE(A)M https://highcliffe.sharepoint.com/sites/LearnSTEM |
| **How will I be assessed?**End of topic assessment  |