

C7 – energy changes	
1. What is an exothermic reaction?	A reaction in which energy is transferred from the reacting substances to the surroundings
2. What is an endothermic reaction?	A reaction in which energy is transferred to the reacting substances from the surroundings
3. Give a use of an exothermic and endothermic reaction	Exothermic – handwarmers / self heating cans Endothermic - instant cold packs
4. Draw the reaction profile for an exothermic reaction	
5. Draw the reaction profile for an endothermic reaction	
6. What is activation energy?	The minimum amount of energy needed before colliding particles have sufficient energy to react
7. What is the reaction that happens in self heating cans?	Calcium oxide + water → calcium hydroxide
8. What is the reaction that happens in instant cold packs?	Ammonium nitrate dissolves in the water absorbing energy from the surroundings
9. Describe an exothermic reaction in terms of bond energy?	The energy released when new bonds are formed is greater than the energy absorbed when bonds are broken.
10. Describe an endothermic reaction in terms of bond energy?	The energy released when new bonds are formed is less than the energy absorbed when bonds are broken.