Chemistry 0 Week 13 HW Assigned on 01/16/2022 Due date: 01/22/2022

- 1. How does adding a catalyst speed up a reaction?
 - A. It heats it up
 - B. It increases the concentration of the reactants
 - C. It provides an alternative pathway for the reaction with a lower activation energy
 - D. All of the above
- 2. A catalyst is_____.
 - A. a substance that speeds up a reaction
 - B. a substance that is not consumed in a chemical reaction
 - C. a substance sometimes called an enzyme
 - D. All of the above
- 3. What type of reaction occurs in a hand warmer?
 - A. Endothermic
 - B. Exothermic
- 4. If a chemical reaction is EXOTHERMIC, the temperature would_____.
 - A. Increase
 - B. Decrease
 - C. Stay the same

5. A student mixed two chemicals to allow them to react. The temperature before the reaction was 25 $^{\circ}$ C. The temperature after the reaction was 18 $^{\circ}$ C. Which of the following is true?

- A. It is an endothermic reaction
- B. It is an exothermic reaction

6. When ammonium nitrate is added to water, an endothermic reaction occurs and _____.

A. nothing changes

- B. the temperature of the reaction mixture falls
- C. the temperature of the reaction mixture increases
- D. Heat is given out
- 7. In an exothermic reaction, _____.
 - A. energy is absorbed from the surroundings and the temperature increases
 - B. energy is released to the surroundings and the temperature of the surroundings increases
 - C. energy is absorbed from the surroundings and the temperature of the surroundings decreases
 - D. energy is released to the surroundings and the temperature of the surroundings decreases
- 8. In an endothermic reaction, _____.
 - A. energy is absorbed from the surroundings and the temperature increases
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