$\qquad$ Date $\qquad$ Period $\qquad$ Energy Ws \#2: Potential Energy Diagrams

Answer the questions by referring to the diagram of the potential energy of a reaction.


1. Which of the letters (a)-(f) in the diagram represents the potential energy of the products?
2. Which letter indicates the potential energy of the activated complex?
3. Which letter indicates the potential energy of the reactants?
4. Which letter indicates the activation energy?
5. Which letter indicates the heat of reaction?
6. Is the reaction exothermic or endothermic?
7. Which letter indicates the activation energy of the reverse reaction?
8. Which letter indicates the heat of reaction of the reverse reaction?
9. Is the reverse reaction exothermic or endothermic?
10. A. If a catalyst were added, which lettered quantities, if any, would change?
B. Would the activation energy increase, decrease, or remain unchanged?
C. Would the heat of reaction increase, decrease, or remain unchanged?
11. $\qquad$
12. $\qquad$
13. $\qquad$
14. $\qquad$
15. $\qquad$
16. $\qquad$
17. $\qquad$
18. $\qquad$
19. $\qquad$
20. A. $\qquad$
B. $\qquad$
C. $\qquad$
