$\qquad$

# Potential Energy \& Enthalpy 

Video Practice Work Unit 5 - Topic 4

## Potential Energy Diagram

The diagram below shows the reaction coordinate for a reversible, catalyzed and uncatalyzed reaction. Referring to the diagram, answer the questions that follow.


1. $\qquad$ Th reaction shown above is (a) endothermic, (b) exothermic.
2. $\qquad$ Which lettered arrow represents the energy of the reactants for the forward reaction?
3. $\qquad$ Which lettered arrow represents the energy of the reactants for the reverse reaction?
4. $\qquad$ Which lettered arrow represents the energy of the products for the forward reaction?
5. $\qquad$ Which lettered arrow represents the energy of the products for the reverse reaction?
6. $\qquad$ Which lettered arrow represents $\Delta \mathrm{H}$ for the forward catalyzed reaction?
7. $\qquad$ Which lettered arrow represents $\Delta \mathrm{H}$ for the forward uncatalyzed reaction?
8. $\qquad$ Which lettered arrow represents $\Delta \mathrm{H}$ for the reverse catalyzed reaction?
9. $\qquad$ Which lettered arrow represents $\Delta \mathrm{H}$ for the reverse uncatalyzed reaction?
10. $\qquad$ Which lettered arrow represents activation energy for the forward uncatalyzed reaction?
11. $\qquad$ Which lettered arrow represents activation energy for the forward catalyzed reaction?
12. $\qquad$ Which lettered arrow represents activation energy for the reverse catalyzed reaction?
13. $\qquad$ Which lettered arrow represents activation energy for the reverse uncatalyzed reaction?
14. $\qquad$ Which lettered arrow represents energy of the activated complex for the catalyzed reaction?
15. $\qquad$ Which lettered arrow represents energy of the activated complex for the uncatalyzed reaction?
16. $\qquad$ Which lettered arrow represents the difference between the activation energies of the catalyzed and the uncatalyzed reactions?
17. $\qquad$ Which lettered arrow represents the difference between the energies of the activated complex for the catalyzed and the uncatalyzed reactions?
18. $\qquad$ The reverse reaction is (a) endothermic, (b) exothermic.
