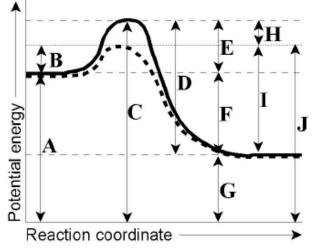


## Potential Energy & Enthalpy

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. \_\_\_\_ Th reaction shown above is (a) endothermic, (b) exothermic.
- 2. \_\_\_\_\_ Which lettered arrow represents the energy of the reactants for the forward reaction?
- 3. \_\_\_\_ Which lettered arrow represents the energy of the reactants for the reverse reaction?
- 4. \_\_\_\_\_ Which lettered arrow represents the energy of the products for the forward reaction?
- 5. \_\_\_\_\_ Which lettered arrow represents the energy of the products for the reverse reaction?
- 6. \_\_\_\_ Which lettered arrow represents  $\Delta H$  for the forward catalyzed reaction?
- 7. \_\_\_\_ Which lettered arrow represents  $\Delta H$  for the forward uncatalyzed reaction?
- 8. \_\_\_\_ Which lettered arrow represents  $\Delta H$  for the reverse catalyzed reaction?
- 9. \_\_\_\_ Which lettered arrow represents ΔH for the reverse uncatalyzed reaction?
- 10. \_\_\_\_\_ Which lettered arrow represents activation energy for the forward uncatalyzed reaction?

- 11. \_\_\_\_\_ Which lettered arrow represents activation energy for the forward catalyzed reaction?
- 12. \_\_\_\_\_ Which lettered arrow represents activation energy for the reverse catalyzed reaction?
- 13. \_\_\_\_\_ Which lettered arrow represents activation energy for the reverse uncatalyzed reaction?
- 14. \_\_\_\_\_ Which lettered arrow represents energy of the activated complex for the catalyzed reaction?
- 15. \_\_\_\_\_ Which lettered arrow represents energy of the activated complex for the uncatalyzed reaction?
- 16. \_\_\_\_\_ Which lettered arrow represents the difference between the activation energies of the catalyzed and the uncatalyzed reactions?
- 17. \_\_\_\_\_ Which lettered arrow represents the difference between the energies of the activated complex for the catalyzed and the uncatalyzed reactions?
- 18. \_\_\_\_ The reverse reaction is (a) endothermic,(b) exothermic.