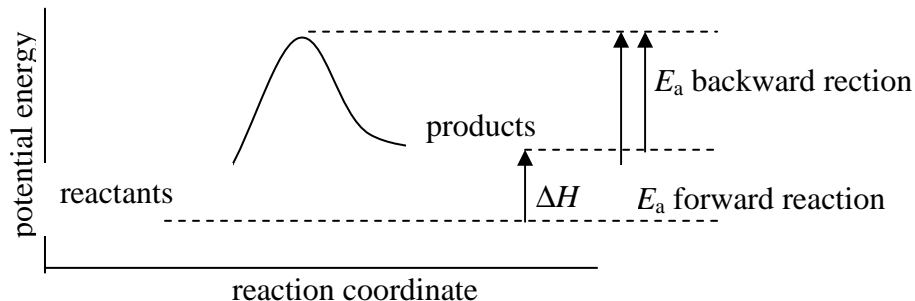


Marks
4

- Draw the potential energy diagram for an endothermic reaction. Indicate on the diagram the activation energy for both the forward and reverse reaction, and the enthalpy of reaction.



As the reaction is endothermic, the energy of the products is higher than that of the reactants.

Would you expect the forward or the reverse reaction to be faster? Why?

The backward reaction would be faster as it has a lower activation energy.

This is a consequence of the reaction being endothermic. As the products have higher energy than the reactants and the same transition state is involved in both the forward and backward reactions, the activation energy for the backward reaction is larger than that for the forward reaction.