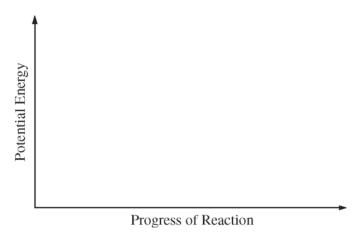
2013 AP® CHEMISTRY FREE-RESPONSE QUESTIONS

(e) Using the axes provided below, draw a curve that shows the energy changes that occur during the progress of the reaction. The curve should illustrate both the proposed two-step mechanism and the enthalpy change of the reaction.



(f) On the diagram above, clearly indicate the activation energy, E_a , for the rate-determining step in the reaction.