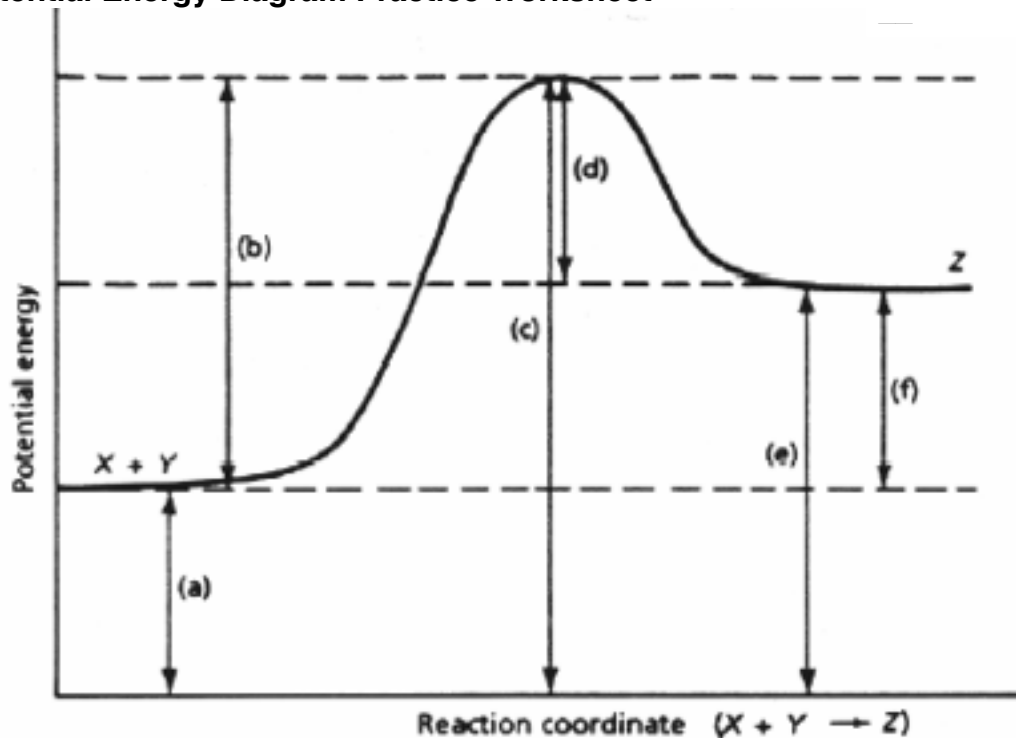


Potential Energy Diagram Practice Worksheet

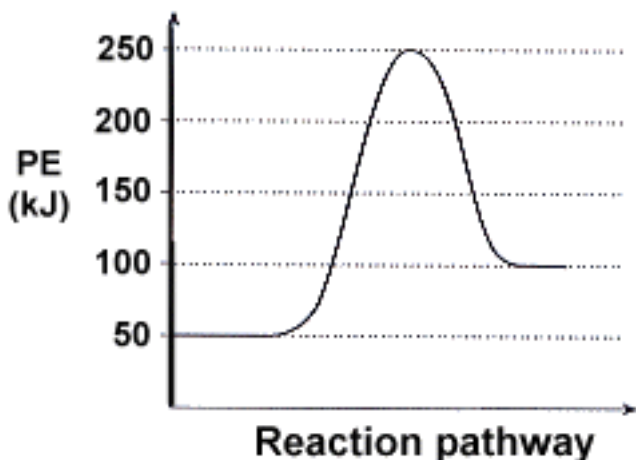
Name _____



1. Which of the letters a–f in the first diagram represents the potential energy of the products? _____
2. Which letter indicates the potential energy of the reactants? _____
3. Which letter indicates the activation energy? _____
4. Which letter indicates the heat of reaction? _____
5. Is the reaction exothermic or endothermic? _____
6. Would the reverse reaction be exothermic or endothermic? _____

On your paper, draw a new potential energy diagram for an exothermic reaction, where the reactants have 250kJ of potential energy stored in their chemical bonds, there is 100kJ of activation energy required and the products have 50kJ of potential energy stored in their chemical bonds. Scale and label the y axis for kJ of potential energy. Calculate the heat of the reaction= _____

Also, show the effect to activation energy when a catalyst is added.



1. What is the potential energy of the reactants?
2. What is potential energy of the products?
3. What is the activation energy of the forward reaction?
4. What is the heat of energy of the forward reaction?
5. What is the activation energy of the reverse reaction?
6. What is the heat of energy of the reverse reaction?