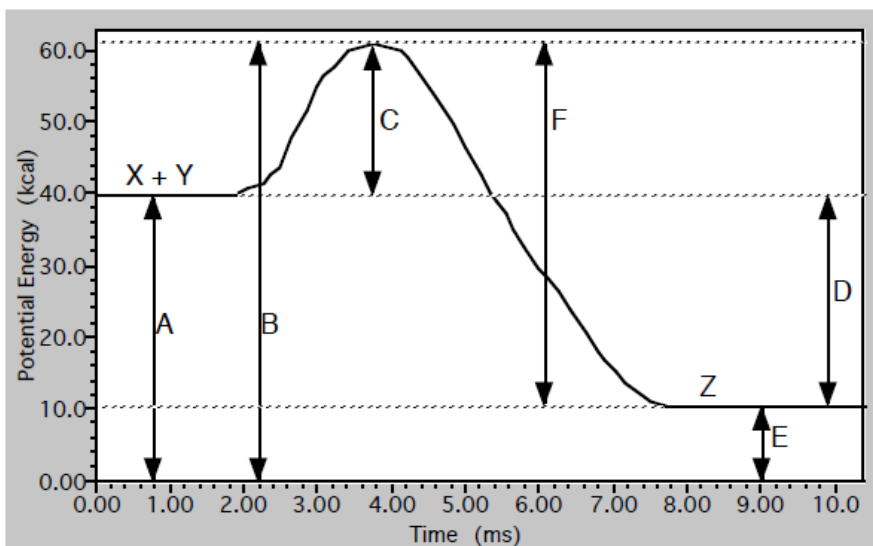


Potential Energy Diagrams and Kinetics

Part I-

Directions: Use the potential energy diagram for the reaction $X + Y \rightarrow Z$ to complete the chart below.



Letter	Term	Description

Part II-

Directions:

1. Draw a potential energy diagram for an endothermic reaction.
2. Label your drawing with the following letters:
 A=PE of products
 D=Energy of activation
 B=PE of reactants
 E=Heat of reaction
 C=PE of the activated complex

Answer Key

Letter	Term	Description
A	PE of Reactants	The combined amounts of the potential energy of the reactants.
B	PE of the Activated Complex	The potential energy of the activated complex.
C	Activation Energy	The amount of energy required to form the activated complex.
D	Heat of the Reaction	The amount of energy given off (or absorbed if it was endothermic) in the reaction.
E	PE of the Products	The potential energy of the product.

Graph 2

1. Draw a potential energy diagram for an endothermic reaction.
2. Label your drawing with the following letters:
A=PE of products
B=PE of reactants
C=PE of the activated complex
D=Energy of activation
E=Heat of reaction

