

REVIEW AND PRACTICE: COLLISION THEORY

- Refer to the potential-energy diagram in figure 1.
 - Which number labels the reactants?
 - Which number labels the products?
 - Which number labels the activated complex?
 - Which letter labels the activation energy for the forward reaction?
 - Which letter labels the activation energy for the reverse reaction?
 - Which letter labels the enthalpy change?
 - Is the forward reaction exothermic or endothermic?
 - Is the reverse reaction exothermic or endothermic?

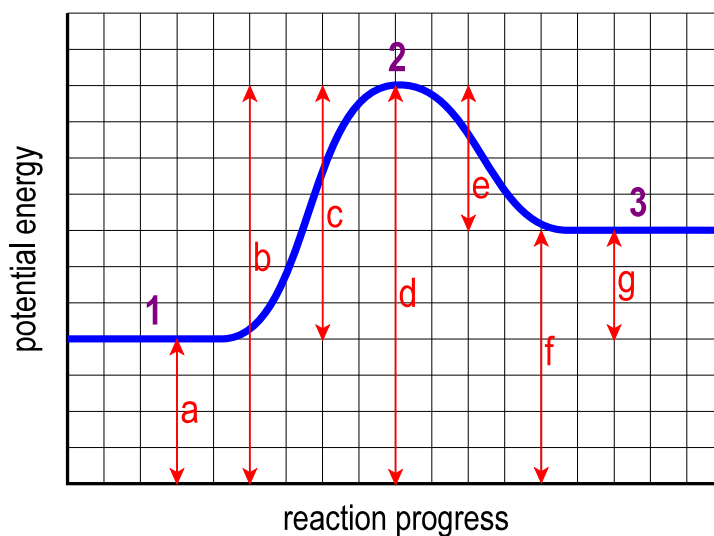


Figure 1

- Refer to the potential-energy diagram in figure 2.
 - Is the forward reaction exothermic or endothermic?
 - What is the activation energy for the forward reaction?
 - What is the enthalpy change for the forward reaction?
 - Write the chemical equation for the forward reaction including an energy term.

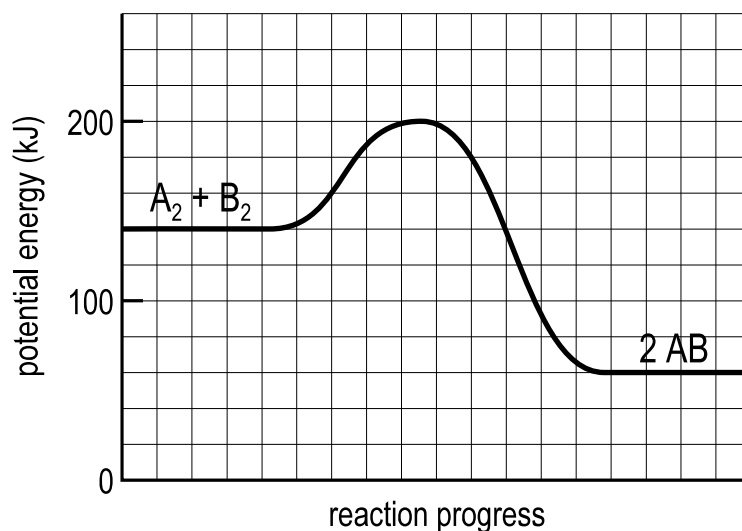


Figure 2

- Give two conditions that must be met for a collision to be effective.