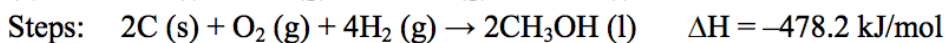
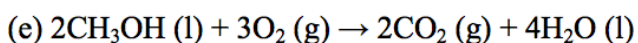
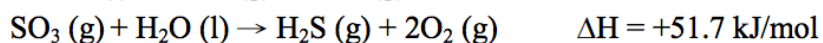
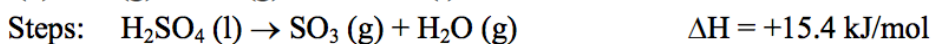
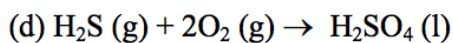
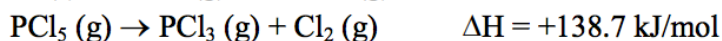
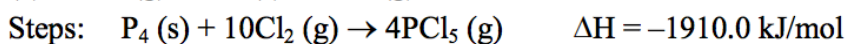
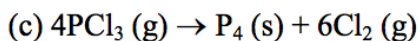
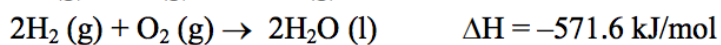
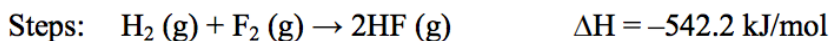
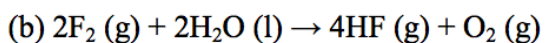
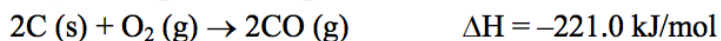
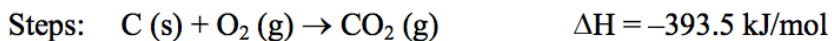
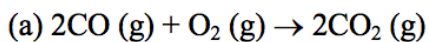
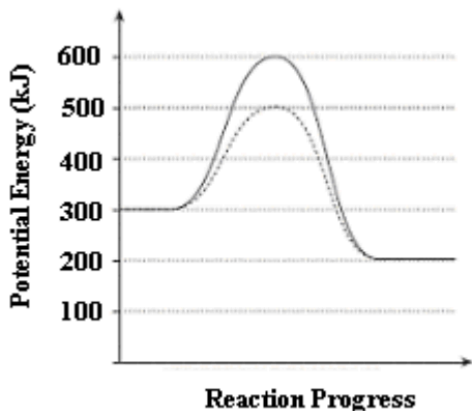


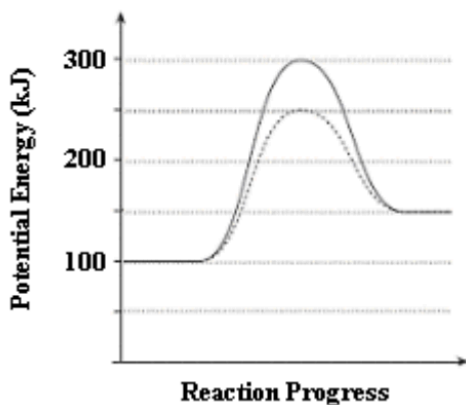
Hess' Law & Potential Energy Diagrams*Practice Sheet #52***Directions:** Use the steps provided to calculate the overall heat of the reaction.

(1) The potential energy diagram for a reaction is shown below.



- What is E_a for the forward, uncatalyzed reaction?
- What is E_a for the forward, catalyzed reaction?
- What is E_a for the reverse, uncatalyzed reaction?
- What is E_a for the reverse, catalyzed reaction?
- What is ΔH for the forward, uncatalyzed reaction?
- What is ΔH for the forward, catalyzed reaction?
- What is ΔH for the reverse, uncatalyzed reaction?
- What is ΔH for the reverse, catalyzed reaction?
- Is the forward reaction endothermic or exothermic?
- Is the reverse reaction endothermic or exothermic?

(2) The potential energy diagram for a reaction is shown below.



- What is E_a for the forward, uncatalyzed reaction?
- What is E_a for the forward, catalyzed reaction?
- What is E_a for the reverse, uncatalyzed reaction?
- What is E_a for the reverse, catalyzed reaction?
- What is ΔH for the forward, uncatalyzed reaction?
- What is ΔH for the forward, catalyzed reaction?
- What is ΔH for the reverse, uncatalyzed reaction?
- What is ΔH for the reverse, catalyzed reaction?
- Is the forward reaction endothermic or exothermic?
- Is the reverse reaction endothermic or exothermic?