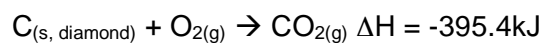
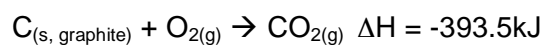


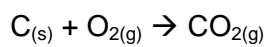
Chapter 11-4: Calculating Heat Changes

- Hess's Law

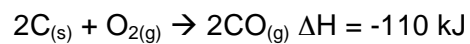
- Example: Use Hess's Law to find the enthalpy changes for the conversion of diamond to graphite. The following enthalpy changes are known:



- Example: Use Hess's Law to find the enthalpy changes for the following equation:



The following heats of reaction are given:



- Standard Heats of Formation

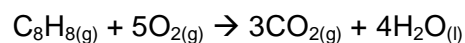
- STUDENTS: Please copy table 11.6 from page 316 here. Without the table you will receive no credit for this assignment.

- Using Heats of Formation to calculate Heat of Reaction

$$\Delta H^0 = \Delta H_f^0 - \Delta H_i^0$$

- Example: What is the standard heat of reaction for the reaction of gaseous carbon monoxide with oxygen to form gaseous carbon dioxide?

- Example: Calculate the heat of combustion of propane (C_3H_8 , $\Delta H_f^0 = -105$ kJ) from standard heats of formation. Use the following equation:



**Homework: Section 11-3 (p317) #30-31
(p318) #32-35**