

## 5.2 Calorimetry and Enthalpy

In this section you will define the following terms: specific heat capacity, calorimetry and calorimeter (p. 292).

Do Practice p. 297, # 1 and 2.

Define Enthalpy and enthalpy change ( $\Delta H$ ), p. 298. Do Practice #1 and 2.

Do Practice p. 304, #1 and 2, 3 and 4.

## 5.3 Bond Energies

- Define: bond dissociation energy (p. 307).
- Define the formula that is used to calculate enthalpy change for a reaction (p. 308).

$(\Delta H) =$

Go through Tutorial #1 and write out each step. You do not solve the problem because it is already solved but you need to analyze the steps. Ensure you understand what GRAS means

Do Practice p. 312, # 1-4.

## 5.4 Hess's Law

1. Read page 314, define what are a single-step and two step chemical equations.
2. Define Hess's Law (p. 314)
3. What are the rules for enthalpy changes (p. 315)
4. Analyze Tutorial # 1, Sample Problem #1.
  - a. What are the steps for solving Hess's law problems?
  - b. How were elimination of products and reactants carried out so the only remaining substance was C(graphite) and C (diamond) ?
5. Do Practice Problems, p. 317, # 1 and 2.