

Chapter 11-2: Measuring and Expressing Change in Heat

- Calorimetry

$$q = \Delta H = m \cdot \Delta t \cdot C$$

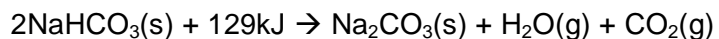
- Enthalpy (H)

To study the amount of heat released during a neutralization reaction, 25.0mL of water containing 0.025 mol HCl is added to 25.0 mL of water containing 0.025mol NaOH in a foam cup calorimeter. At the start, the solutions and calorimeter are all at 25.0°C. During the reaction, the highest temperature observed is 32.0°C. Calculate the heat (in kJ) released during this reaction. Assume the densities of all solutions are 1.00 g/mL

- Thermochemical Equations

- Heat of Reaction

- Using the following thermochemical equation, calculate the kilojoules of heat required to decompose 2.24 moles of $\text{NaHCO}_3(\text{s})$. (p304, sample problem 11-3)



- STUDENTS: Please copy Table 11.4 from page 305 here

Homework: Section 11-2 (p304) #13-14, (p306) #15-19