Thermochemistry I Worksheet                          Name _____
Chem 140


1) When calcium chloride is dissolved in water, heat is given off. Write the balanced ionic equation/rxn below; include physical states.


2) If 0.025 moles of calcium chloride is dissolved in water, how much heat is generated? (Given $\Delta H_{dissolution}$=-81.8 kJ/mol)


3) If 2.50 grams of calcium chloride is dissolved in water, how much heat is generated? (Given $\Delta H_{dissolution}$=-82.4 kJ/mol)


4) If 0.025 moles of calcium chloride is dissolved in 10.0 mL water at 25 °C, what will be the final temperature of the water?


5) If 2.50 grams of calcium chloride is dissolved in 10.0 mL water at 25 °C, what will be the final temperature of the water?

6) When ammonium nitrate is dissolved in water, heat is consumed from the surroundings. Write the balanced ionic equation/rxn below; include physical states.

7) If 0.028 moles of ammonium nitrate is dissolved in water, how much heat is consumed? (Given $\Delta H_{dissolution}$=+23.5 kJ/mol)

8) If 2.40 grams of ammonium nitrate is dissolved in water, how much heat is consumed? (Given $\Delta H_{dissolution}$=+23.5 kJ/mol)

9) If 0.028 moles of ammonium nitrate is dissolved in 10.0 mL water at 25 °C, what will be the final temperature of the water?

10) If 2.40 grams of ammonium nitrate is dissolved in 10.0 mL water at 25 °C, what will be the final temperature of the water?