

Experiment 14 Worksheet: Endo- and Exo- Energy's Comings and Goings

Purpose: *(A statement should be made here regarding what your experiment is designed to accomplish)*

Procedure: *(Describe here how you went about completing your experiment. Use enough detail that someone could repeat it if necessary. Also reference any books or manual you may have used to assist you.)*

Data:

Observations of the reaction between KCl & Water: _____

(Complete the Table using experimental results for the KCl reaction)

Time (sec)	Temperature (°C)
0	
15	
30	
45	
60	
75	
90	
105	
120	

Observations of the reaction between KOH and water:

(Complete the Table using experimental results for the KOH reaction)

Time (sec)	Temperature (°C)
0	
15	
30	
45	
60	
75	
90	
105	
120	

Calculations:

For the following calculations, remember that the reaction taking place is the “system” and the temperature change that is being observed/measured is taking place in the solution which is also the “surroundings”.

Calculate the ΔT ($\Delta T = T_F - T_I$) for the reaction between KCl and Water:

Based on your ΔT , is the reaction endothermic or exothermic? Explain:

Calculate the ΔT ($\Delta T = T_F - T_I$) for the reaction between KOH and water:

Based on your ΔT , is the reaction endothermic or exothermic? Explain:

Conclusions: *(Summarize your results here and discuss possible errors that may have occurred during the testing.)*
