

**Chemistry 110**  
**Laboratory Report**  
**Iron and Sulfur Lab**

Name \_\_\_\_\_

**Safety**

Lab work is completed. Procedures given in Chemistry Laboratory: Safety, Procedures, and Emergencies sheet are followed during lab. Lab work areas cleaned.

**Data and Observations**

Physical Properties of Iron Observed

Chemical Properties of Iron Observed

Physical Properties of Sulfur Observed

Chemical Properties of Sulfur Observed

Observations of Iron and Sulfur When Mixed (Unheated)

Observations of Iron and Sulfur *during* heating

Physical Properties of Product After Heating

Chemical Properties of Product After Heating

Total Mass before heating \_\_\_\_\_

Total Mass after heating \_\_\_\_\_

Other observations

### **Analysis**

In Part ID, did a chemical reaction occur when you simply mixed the iron and sulfur? Use your observations to support your conclusion.

Are the chemical properties of the product different than the chemical properties of the iron and the sulfur? Based on this, did a chemical reaction occur between the iron and sulfur when they were heated? Explain.

When you heated the iron and sulfur, did the mass change significantly? (Note: a change of less than 0.01 g can be considered as insignificant in this experiment.) Is this result consistent with what you have learned in this class? Use the atomic theory to explain.