Lab: Burning Magnesium

Name:

Block:

For Students:	For Teacher:
Lab performed:	Pre-lab completion: Yes No
Lab due:	Lab Submitted: On Time Late

Introduction & Objectives

Objectives:

1.

2.

Pre-lab Question: Rusting Iron

Consider the following data:

Before the Reaction	
Mass of iron	2.79g
After the Reaction	
Mass of compound (iron and oxygen)	3.99g
Mass of oxygen (mass of compound – mass of iron)	

1. Calculate the number of mol of iron that reacted.

2. Calculate the number of mol of oxygen that reacted.

3. What is the empirical formula for rust? (subscripts must be whole numbers!)

Procedure & Observations

Procedure:

Data:

Before reaction	
1. Mass of empty crucible	
2. Mass of Magnesium ribbon	
After reaction	
3. Mass of crucible and residue	
4. Mass of residue (calculated: #3 – #1)	
5. Mass of Oxygen reacted (calculated: #4 – #2)	

Analysis of Results

Answer the following

1. What is the balanced synthesis reaction?

2. What is the chemical formula of your product?

3. Calculate the number of moles of Magnesium that reacted (use #2).

4. Calculate the number of moles of Oxygen that reacted (use #5).

5. Based on your answers to #3 and #4, what is the empirical formula of your product? Does this match what you predicted in Question #2?

Conclusion

State the results of your objectives:

1.

2.