Name _____

Chemical Equations (p. 638 – 640)

I. Balanced Equations

1. **Define the term balanced chemical equation.**

p. 638

Balanced Chemical Equation – balancing process involving changing coefficients in a chemical reaction to achieve the same number of atoms of each element on both sides of the equation

2. **Identify the following based on the chemical reaction listed below.**

$$HgO \rightarrow Hg + O_2$$

p. 638 - 639

Reactants		Products	
Total # of Hg	1	Total # of Hg	1
Total # of O	1	Total # of O	2

NOT BALANCED!

Balance the following chemical equation.

$$2\,HgO \rightarrow 2\,Hg + O_2$$

3. **How are coefficients sometimes determined for chemical equations?**

Trial + Error (Practice makes somewhat perfect)

4. **Identify the following based on the chemical reaction listed below.**

$$Mg + O_2 \rightarrow MgO$$

p. 639

Reactants		Products	
Total # of Mg	1	Total # of Mg	1
Total # of O	2	Total # of O	1

NOT BALANCED!

Balance the following chemical equation.

$$2\,Mg + O_2 \rightarrow 2\,MgO$$

5. **Identify the following based on the chemical reaction listed below.**

$$Li + H_2O \rightarrow LiOH + H_2$$

p. 640

Reactants		Products	
Total # of Li	1	Total # of Li	1
Total # of H	2	Total # of H	3
Total # of O	1	Total # of O	1

NOT BALANCED!

Balance the following chemical equation.

$$2\,Li + 2\,H_2O \rightarrow 2\,LiOH + H_2$$