Name: _____ Date: _____/_____/_____ Period: _____

Balancing Equations Webquest

Directions: Go to your teacher's blog.
Click on the following sites under the blogroll.
Answer the questions and balance the equations.

Balancing #1- Chemical Equations and Types of Reactions
http://webpages.charter.net/mcooper/reactions.htm

1. What is a chemical reaction?

   _____

2. What is a chemical equation?

   _____

3. What is different about a reversible reaction?

   _____

4. What are the indicators that a chemical reaction has taken place?

   _____

5. Look at Examples of Chemical Changes.
   How are the chemical changes different from the listed physical changes?

   _____

6. Look at Chemical equations of chemical reaction.
   What does (aq) mean?

   _____

7. Look at Balancing Equations.
   What is the only thing that can be added to a chemical equation in order to balance it?

   _____

8. Write the balanced equation for nitrogen and hydrogen gas forming ammonia.

   _____

   Why is there a 2 placed in front of ammonia?

   _____

9. skip 9, 10, and 11

12. Look at Synthesis Reactions.
    How can a synthesis reaction be recognized?

    _____

13. Look at Decomposition Reactions.
    How can this reaction be recognized?

    _____

14. Look at Displacement Reactions.
    How can this reaction be recognized?

    _____

15. Look at Double Replacement Reactions.
    How can this reaction be recognized?

    _____

Balancing #2- Classic ChemBalancer
http://funbasedlearning.com/chemistry/chemBalancer/ques1.htm

- Click the button for "Directions" and READ CAREFULLY.
- Click the "OK" button and return to the game screen.
- Click "Start Game" button to give it a try.
- Start by adding a "1" in each box and compare the number of atoms of each element you have on each side.
- Change coefficients to balance each equation and click the "Balanced" button to check it. Correct it if it's wrong.
- Use the information in the pop-windows to answer each question and the write the balanced equation before clicking the OK button.

1. Reaction **1**
   a. Balanced Chemical Reaction:

   b. What does "Ferrum" mean? _____

   c. What color is sulfur? _____

2. Reaction **2**
   a. Balanced Chemical Reaction:

   b. What is HCl? _____

   c. Where is it found in your body? _____

3. Reaction **3**
   a. Balanced Chemical Reaction:

   b. What are Pyrotechnics? _____

4. Reaction **4**
   a. Balanced Chemical Reaction:

   b. What was the Hindenburg? _____

   c. What gas was used in it? _____

   d. What gas is used today? _____

5. Reaction **5**
   a. Balanced Chemical Reaction:

   b. What does the symbol "Hg" represent? _____

   c. Why should you never touch it?

   _____

6. Reaction **6**
   a. Balanced Chemical Reaction:

   b. What gas is produced when calcium metal is dropped in water?

   _____

7. Reaction **7**
   a. Balanced Chemical Reaction:

   b. What is CH_4? _____

   c. What gases is it related to? _____

8. Reaction **8**
   a. Balanced Chemical Reaction:

   b. What is H_2O_2? _____

   c. What is it used for? _____

9. Reaction **9**
   a. Balanced Chemical Reaction:

   b. What two things is ammonia used for today?

   _____

10. Reaction **10**
    a. Balanced Chemical Reaction:

    b. How is the oxidation of aluminum different from that of iron?

    _____

11. Reaction **11**
    a. Balanced Chemical Reaction:

    b. What gas is released when potassium permanganate is decomposed?

    _____