

Directions:

1. Start Internet Explorer or Netscape and go to <http://funbasedlearning.com/chemistry/chemBalancer/default.htm>
2. Click 'Directions'. Read and understand the directions.
3. Click 'OK'.
4. Click on 'Start Game'
5. Try entering some numbers in the text boxes in front of each molecule. What happens?
6. If you forget the directions, click on the 'How to Play the Game' link. Click 'OK' when you finish reading them to return to the game.
7. When you think you have typed the right numbers in all the boxes, click the 'Balanced' button.
8. If you didn't get it right, try again.
9. If you did get it right, then fill in the correct answers on this worksheet for #1.
10. Repeat steps 7-9 for the other 10 questions.
11. Now do the two problems on the back of this worksheet. You can draw the molecules just like the program did to figure out the answer.

Questions

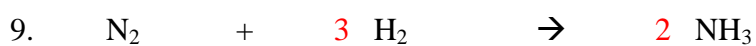
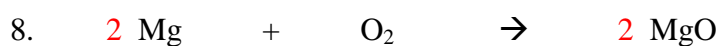
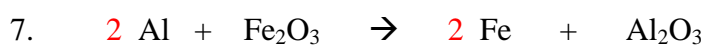
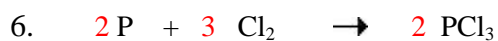
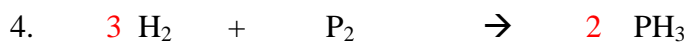
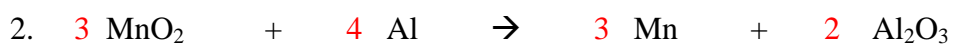
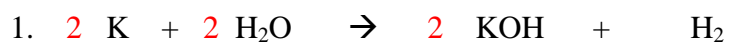
Fill in the blanks below as you go through the game. This is so I have a record that you did your assignment.

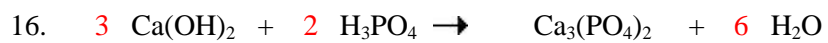
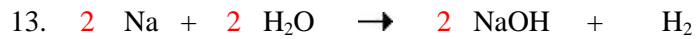
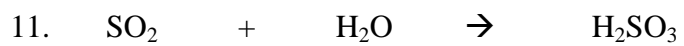
1. 1 Fe + 1 S → 1 FeS
2. 1 H₂ + 1 Cl₂ → 2 HCl
3. 2 Mg + 1 O₂ → 2 MgO
4. 1 O₂ + 2 H₂ → 2 H₂O
5. 2 HgO → 2 Hg + 1 O₂
6. 1 Ca + 2 H₂O → 1 Ca(OH)₂ + 1 H₂
7. 1 CH₄ + 2 O₂ → 1 CO₂ + 2 H₂O
8. 1 Na₂O₂ + 1 H₂SO₄ → 1 Na₂SO₄ + 1 H₂O₂
9. 1 N₂ + 3 H₂ → 2 NH₃
10. 4 Al + 3 O₂ → 2 Al₂O₃
11. 4 KMnO₄ → 2 K₂O + 4 MnO + 5 O₂

Name: Answer Key
8th

Date: _____
Balancing Equations Worksheet I

Balance the following chemical equations



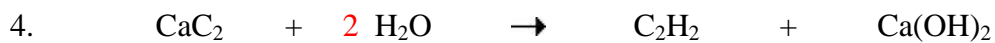
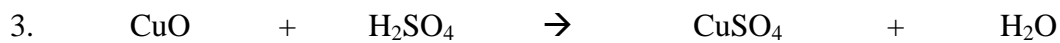
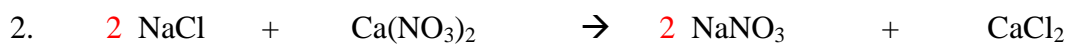


Name: Answer Key

Date: _____

8- _____

Balancing Equations Worksheet II





9. Hydrogen plus oxygen yields water



10. Sodium plus water yields sodium hydroxide plus hydrogen



11. Hydrochloric Acid plus Iron Sulfide yields Iron Chloride plus Hydrogen Sulfide



12. Aluminum Sulfate plus Calcium Hydroxide yields Aluminum Hydroxide plus Calcium Sulfate



Name: Answer Key

Date: _____

8 - _____

Type of Equations

Determine the reaction type for each of the following equations:

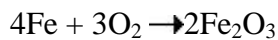
synthesis

decomposition

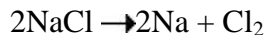
single replacement

double replacement

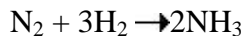
1. synthesis



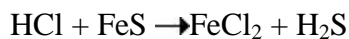
2. decomposition



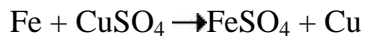
3. synthesis



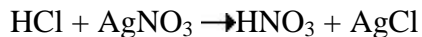
4. double replacement



5. single replacement



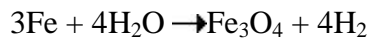
6. double replacement



7. synthesis



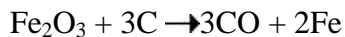
8. single replacement



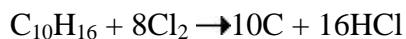
9. decomposition



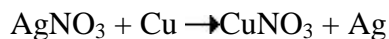
10. single replacement



11. single replacement



12. single replacement

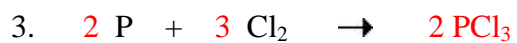


Name: Answer Key

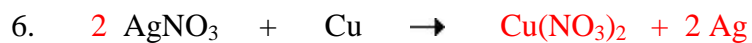
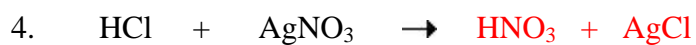
8 - _____

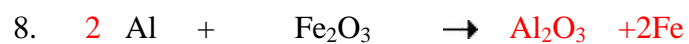
Date: _____

Balancing Equations Worksheet III



use covalent bonding

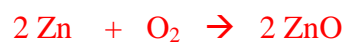




12. Magnesium plus oxygen yields



13. Zinc + Oxygen \rightarrow



14. Hydrogen Sulfide \rightarrow



15. Potassium Chloride →



16. Silver plus Copper nitrate yields



17. Aluminum Hydroxide + Sodium →



18. Aluminum plus lithium iodide yields



19. Aluminum plus lead (II) nitrate yields



Most Reactive to Least Reactive
 Lithium Potassium Sodium Magnesium Aluminum Zinc Lead Hydrogen Copper Silver