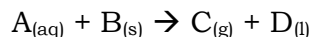
Name: KeyPeriod: **By the end of Unit 5, you should be able to:***Chapter 11*

35. Write word and chemical equations based on chemical reactions
36. Balance chemical equations
37. Identify the five types of chemical reactions
38. Predict the products of chemical equations

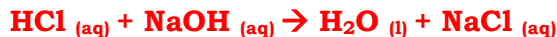
Chemical Reaction: Answer the following questions about the generic chemical equation below. (pg 346-348)



1. A and B represent the **Reactants**.
2. C and D represent the _____.
3. The (aq) stands for **aqueous** which means **dissolved in water**.
4. The (s) stands for _____.
5. The (g) stands for **gas**.
6. The (l) stands for _____.
7. The \rightarrow stands for **yields, produces, forms, creates**.

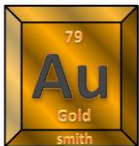
Word to Chemical Equations: Write the following word equations as chemical equations. Do not worry about balancing the equations. Include the state of matter when it is given.

8. Methane (CH₄) in the gaseous state reacts with oxygen gas to yield water and carbon dioxide gas.
9. Aqueous hydrogen chloride reacts with aqueous sodium hydroxide to create water and aqueous sodium chloride.



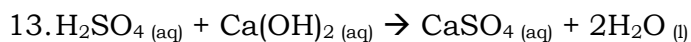
10. Potassium chloride mixed with oxygen gas forms potassium chlorate.
11. Calcium carbonate breaks into calcium oxide and carbon dioxide.



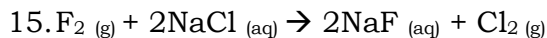
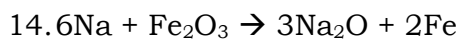


12. Lithium oxide combines with water to form lithium hydroxide.

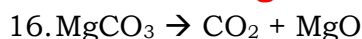
Chemical to Word Equations: Write the following chemical equations as word equations. Include the state of matter when they are provided.



Aqueous hydrogen sulfate and aqueous calcium hydroxide creates aqueous calcium sulfate and water.



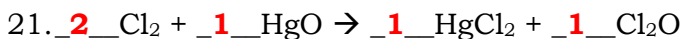
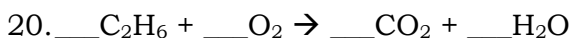
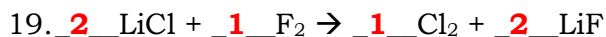
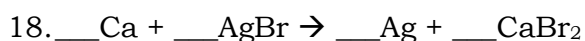
Fluorine gas and aqueous sodium chloride create aqueous sodium fluoride and chlorine gas.

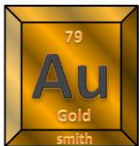


Sodium hydrogen carbonate decomposes into sodium carbonate, water, and carbon dioxide

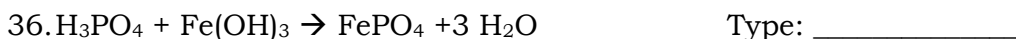
Balancing Chemical Reactions: Balance the following chemical reactions.

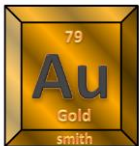
(pg. 349-354)





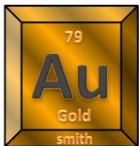
Types of Reactions: Identify the type of chemical reaction shown. (pg. 356-367)





Predicting Products: Predict the products if the following chemicals are combined.
Balance the equations. If the reaction will not occur, write "no reaction". (pg 366-367)





Write and balance the chemical equations if the following are combined (3 pt).

53. Sodium chloride and lithium



54. Magnesium nitrate and lead (IV) phosphate

55. Hydrogen cyanide and gold (I)

No Reaction

56. Oxygen gas and butanol ($\text{C}_4\text{H}_{10}\text{O}$)