

Explain the following in your own words. (1 point each)

1. What does a **driving force** do?

Cause a reaction to occur

2. What is a **precipitate**?

the solid formed

3. What is a **precipitation reaction**?

a reaction that forms a solid

4. What is **precipitation**?

the act of forming a solid from
2 aqueous solutions

Name the four driving forces for reactions that we discussed in Chapter 7. (1 point each)

5. Formation of a solid

6. formation of water

7. Transfer of electrons

8. formation of a gas

Answer the following with a word or phrase. (1 point each)

9. What is the **driving force** of a **PRECIPITATION** reaction?

formation of a solid

10. What is a **STRONG ELECTROLYTE**?

an ionic compound that dissolves completely in water producing separate ions

11. What is the underlying reason that causes reactions to occur?

achievement of a more stable, less energy consuming state.

Determine the solubility of the following compounds in water. Circle the correct response.

12. AgCl SOLUBLE INSOLUBLE

13. Na₂CO₃ SOLUBLE INSOLUBLE

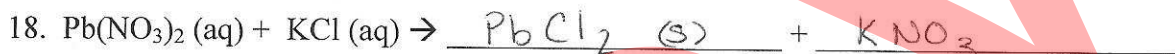
14. BaS SOLUBLE INSOLUBLE

15. CaCl₂ SOLUBLE INSOLUBLE

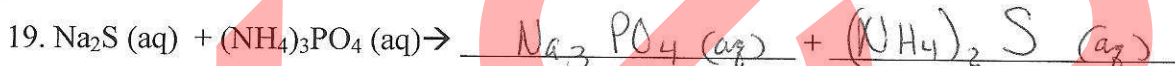
16. Na₂S SOLUBLE INSOLUBLE

17. BaSO₄ SOLUBLE INSOLUBLE

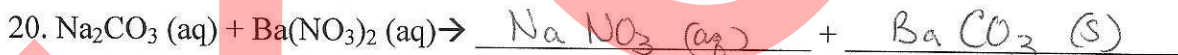
Predict the products, determine and record the solubility of each product, and indicate if the reaction occurs or not by circling the proper choice for the following possible precipitation reactions. (3 points each)



REACTION OCCURS NO REACTION



REACTION OCCURS NO REACTION



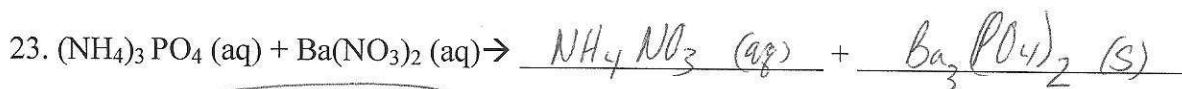
REACTION OCCURS NO REACTION



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REACTION OCCURS NO REACTION



REACTION OCCURS NO REACTION

Explain the following in your own words. (1 point each)

1. What does a **driving force** do?

Causes a reaction to occur

2. What is an **acid**?

a substance that produces H^+ ion (or hydrogen ion) when dissolved in water.

3. What is a **base**?

a substance that produces OH^- ion (or hydroxide ion) when dissolved in water.

When electrons are transferred in a reaction, what 2 processes are occurring at the same time?

4. oxidation

5. reduction

6. Gain of electrons is known as reduction.

7. Loss of electrons is known as oxidation.

8. When a reaction forms a gas what other **two** driving forces might also be helping to cause the reaction. (half point each)

formation of water, transfer of electrons

Name the four driving forces for reactions that we discussed in Chapter 7. (1 point each)

9. formation of a solid

10. formation of a gas

11. formation of water

12. transfer of electrons

Answer the following with a word or phrase. (1 point each)

13. If a reaction is termed a "REDOX" reaction, then the driving force is the

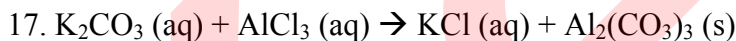
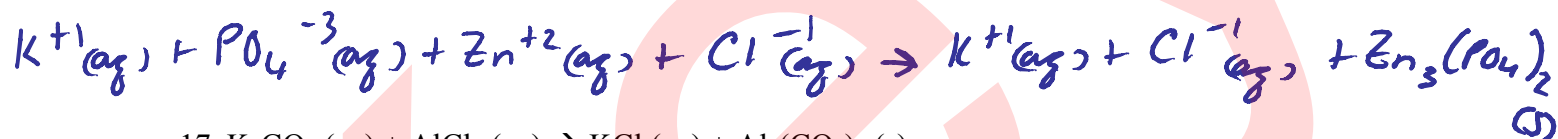
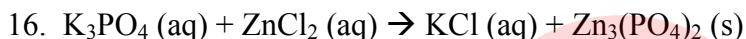
transfer of electrons

14. An "ACID-BASE" reaction results in the formation of water.

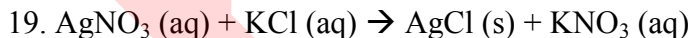
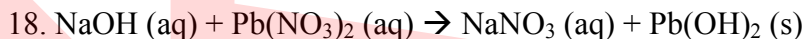
15. A net ionic equation shows only those chemical species that are

actively participating.

For the following precipitation reaction write the COMPLETE IONIC EQUATION. (4 points)



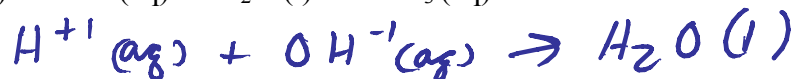
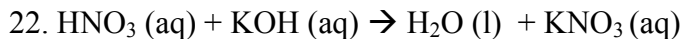
For the following precipitation reaction, write the NET IONIC EQUATION. (3 points)



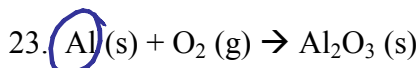
Predict the products for the following reactions. Circle the product that is the salt. (2 points each)



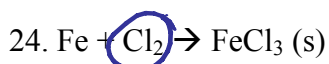
For the following acid-base reaction, write the NET IONIC EQUATION. (3 points)



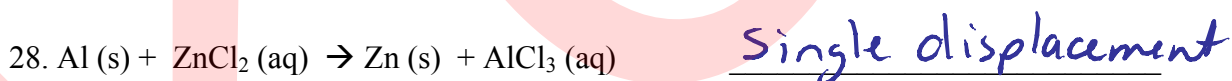
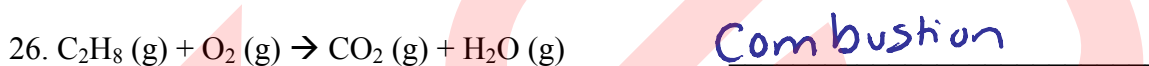
Circle the substance being oxidized in the following unbalanced equation.



Circle the substance being reduced in the following unbalanced equation.



For the following unbalanced reactions identify the type of reaction based on what is happening. Each choice is used only once. Your possible choices are: COMBUSTION, DECOMPOSITION, DOUBLE DISPLACEMENT, SINGLE DISPLACEMENT, SYNTHESIS.



For each of the following reactions identify **two** driving forces for the reaction. (2 pts each)

