

1. Silver nitrate (aq) + copper (s) → copper (II) nitrate (aq) + silver (s)

- What type of reaction is occurring? How do you know?
- What do you have to look at to know if this reaction will occur or not?
- What is the precipitate formed in the reaction?

2. Propane (C₃H₈) burns in the presence of oxygen gas →

- What type of reaction is occurring? How do you know?
- What is the formula for oxygen in this reaction? Why?
- What is the coefficient for carbon dioxide in the balance chemical equation?

3. Iron (III) chloride (aq) + sodium hydroxide (aq) → net ionic equation

- What type of reaction is occurring? How do you know?
- What type of compounds are the reactants and products? How do you know?
- What does the "aq" stand for in the reaction? Why is knowing the states of matter important?

4. Hydrogen (g) + nitrogen (g) → ammonia (g)

- What type of reaction is occurring? How do you know?
- What product(s) is/are formed?
- Are there any subscripts used in this equation? What do they tell us?

5. Magnesium oxide (s) is heated and breaks down into its elements.

- What type of reaction is occurring? How do you know?
- What is/are the reactant(s) in this reaction?
- Why do chemical equations have to be balanced?

6. Write the molecular, complete, & net ionic equation when solutions of silver sulfate and magnesium chloride react.

- What is the precipitate in this reaction?