

Warm up:



Study Notes/Questions

Types of Chemical Reactions**Six types:**

- Classified according to patterns of _____
 - Study pattern to predict products
1. _____ – combining 2 (or more) substances into 1
 - can start with elements or compounds
 - follow rules for writing formulas for product

 2. _____ – 1 substance breaking down into 2 (or more)
 - products are elements or simpler compounds

 3. _____ – element reacts with compound
 - single element replaces one element in compound
 - metal replaces metal, non-metal replaces non-metal

 4. _____ – 2 compounds switch partners
 - 2 elements replace each other
 - new compounds will be ionic (+ ion/-ion)
 - follow formula writing rules

 5. _____ (special kind of Double Replacement)
H⁺ from acid and OH⁻ from base neutralize to form H₂O
Acid + Base Salt + Water

 6. _____ - burning of hydrocarbons
 - **always** requires oxygen gas
 - products are **always** CO₂ and H₂O

9.3 Type of Chemical Reactions

Predicting Products

Given the _____ for a reaction, you will be asked to predict _____ based on the patterns shown

This requires an understanding of reaction types, chemical formula writing, and balancing equations

Summary: (two to three sentences summarizing this section)

Self-Reflection Questions:

1. Describe one thing you learned about this topic today.

2. Describe one thing about this topic you want to learn in more detail.