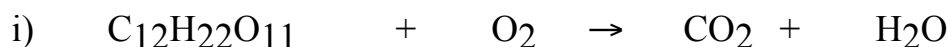
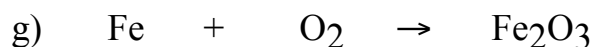
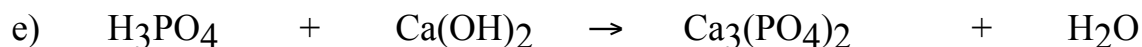
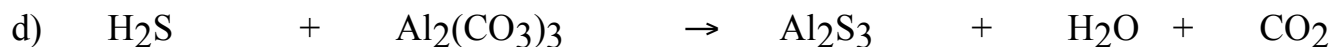


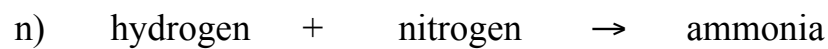
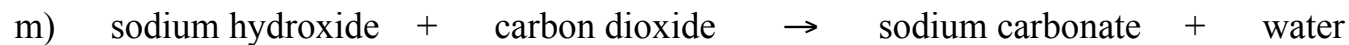
BALANCING SKELETAL EQUATIONS

Balance the following skeletal equations:



BALANCING WORD EQUATIONS

Balance the following word equations:

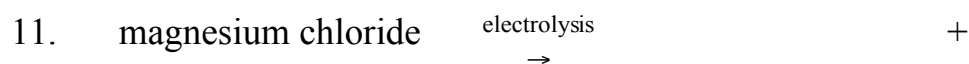
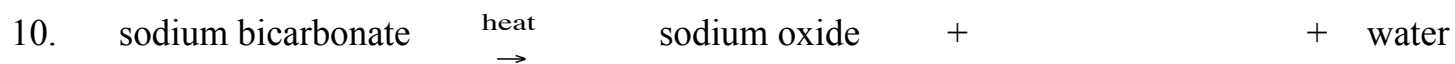


A) Synthesis Reactions

For each of the following, complete and give the Balanced Chemical equation:

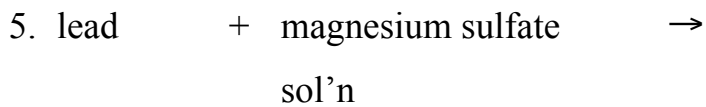
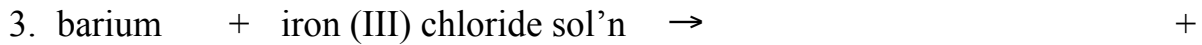
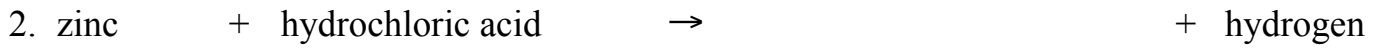
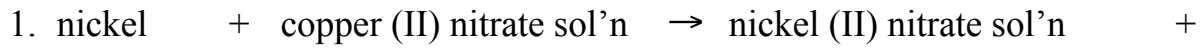


B) Decomposition Reactions



C) Single Displacement Reactions

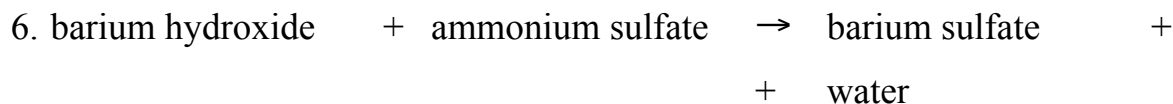
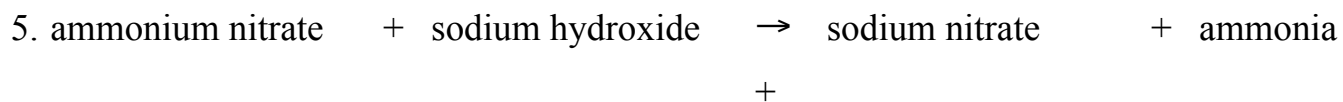
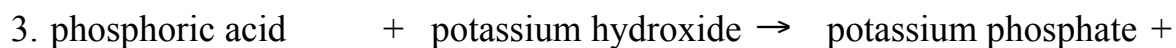
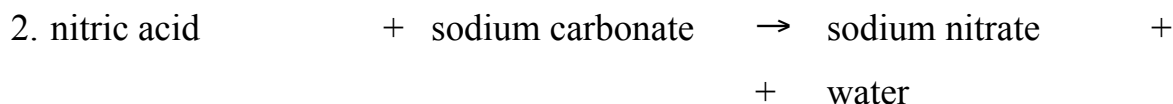
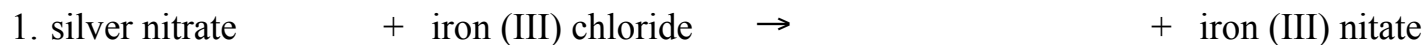
For each of the following, complete and give the Balanced Chemical equation:



D) Double Displacement Reactions

NOTE: Due to lack of space, assume all products and reactants are solutions (aq) unless otherwise stated

For each of the following, complete and give the Balanced Chemical equation:



Organic Reactions

Alkanes

1. What is the equation for the complete combustion of pentane?
2. Give an example of a cracking of an alkane.
3. Give the equation of the reaction of bromine with ethane.

Alkenes

4. What is the equation for the complete combustion of 2-pentene?
5. Give the equation of the reaction of bromine with 2-hexene.
6. Give the equation of the reaction of water with propene.

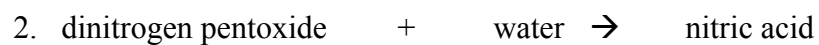
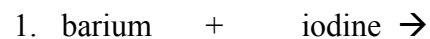
Alkynes

7. What is the equation for the complete combustion of propyne?
8. Give the equation of the reaction of hydrogen chloride with 2-hexyne.
9. Give the equation of the reaction of water with propyne.

EQUATION DRILL WORKSHEET

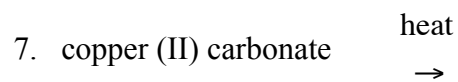
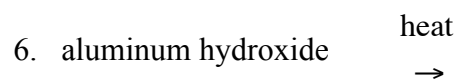
For each of the following, give the:

- completed word equation
- the balanced chemical equation
- electron dot diagrams for all reactants and products
- reaction type(s) [as many classes as possible]



3. the formation of an acidic oxide of your choice

4. a basic oxide of your choice with water



8. nickel + copper (II) nitrate sol'n →

9. zinc + potassium hydroxide sol'n →

10. chlorine + gallium iodide sol'n →

11. magnesium sulfide sol'n + iron (III) chloride sol'n →

12. aluminum chloride sol'n + sodium carbonate sol'n →
"boiled dry and then heated"

13. phosphoric acid + potassium hydroxide sol'n →

14. lithium hydroxide sol'n + sulfur trioxide gas →

15. ammonium chloride sol'n + calcium hydroxide sol'n →

16. barium hydroxide sol'n + ammonium sulphate sol'n →