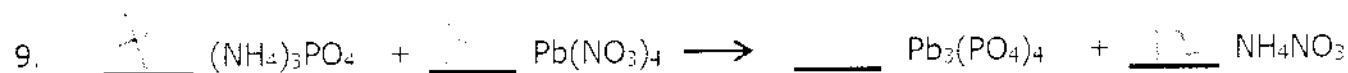
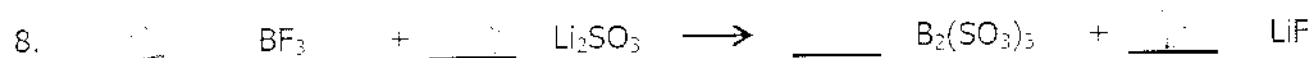
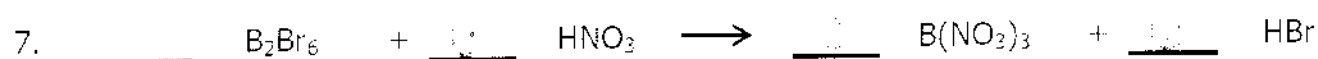
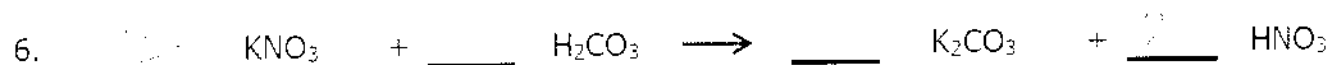
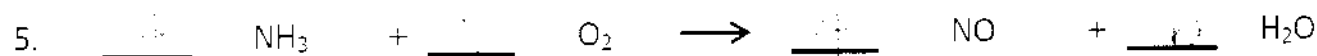
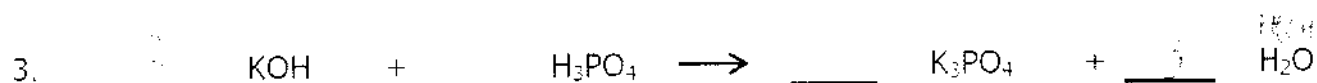
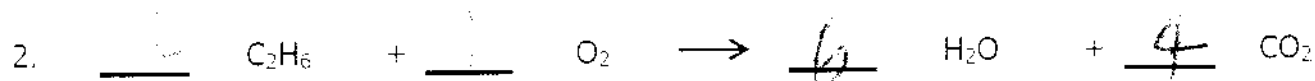
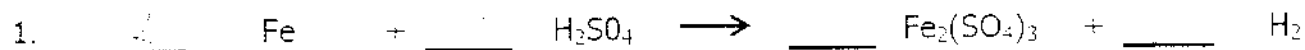


AP Chemistry Summer Assignment

Balancing Equations

Balance the following chemical equations.



MOLES ↔ GRAMS, MOLARITY, AND STOICHIOMETRY

- Use the Periodic Table included in this packet for the atomic masses. **Do not** round the atomic masses.
- Show cancellation of units and report the final answer with the correct unit and correct number of sig figs.

1. Convert the following to moles :

a. 36.85 g C = _____

b. 170 g O₂ = _____

c. 24.0 g Cu = _____

d. 165.02 g H₂O = _____

e. 320.0 g CaCO₃ = _____

f. 50.020 g Ca₃(PO₄)₂ = _____

2. Convert the following to grams:

a. 1.20 mol H₂ = _____

b. 0.052 mol Ca = _____

c. 10.0 mol CO₂ = _____

d. 0.00650 mol AgNO₃ = _____

e. 1.025 mole Al₂(SO₄)₃ = _____

5. Translate the following word equations to a balanced chemical

a. iron (II) oxide + aluminum $\rightarrow$ iron + aluminum oxide



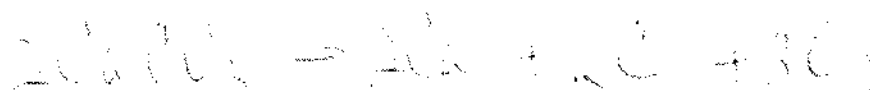
b. hydrochloric acid + sodium hydroxide $\rightarrow$ water + sodium chloride



c. calcium phosphate + sulfuric acid $\rightarrow$ calcium sulfate + phosphoric acid



d. calcium carbonate $\rightarrow$ calcium + carbon + oxygen gas



e. sodium chloride + silver nitrate $\rightarrow$ sodium nitrate + silver chloride



f. potassium hydroxide + sulfuric acid $\rightarrow$ potassium sulfate + water



6. Identify each of the equations you balanced in #5 as **reduction-oxidation**, **precipitation** or **acid-base (neutralization)** reactions.

a. **Redox**

b. **acid-base (neutralization)**

c. **acid-base (neutralization)**

d. **Redox**

e. **precipitation**

f. **acid-base**

AP Chemistry Summer Assignment 2016

Write the name for the following compounds.

