

Name: \_\_\_\_\_

10 Pts.

**Classify and Write a Balanced Chemical Equation for each of the Following Reactions.**

- For the reaction of aluminum with oxygen to form aluminum oxide:
  - Each aluminum atom (gains/loses) how many electrons? \_\_\_\_\_
  - Each oxygen atom (gains/loses) how many electrons? \_\_\_\_\_
  - How many total electrons are transferred? \_\_\_\_\_
  
- For the reaction of calcium and fluorine to form calcium fluoride:
  - Each calcium atom (gains /loses) how many electrons? \_\_\_\_\_
  - Each fluoride ion (gains loses ) how many electrons? \_\_\_\_\_
  - How many total electrons are transferred? \_\_\_\_\_
  
- Classification: \_\_\_\_\_  
Potassium phosphate and nickel (III) nitrate →
  
- Classification: \_\_\_\_\_  
Nickel(II) chloride and calcium →
  
- Classification: \_\_\_\_\_  
Butane,  $C_4H_{10}$  is combusted
  
- Classification: \_\_\_\_\_  
Potassium chloride is decomposed.
  
- Classification: \_\_\_\_\_  
Magnesium and nitrogen →
  
- Classification: \_\_\_\_\_  
Bubbles form when an electric current is added to water.