

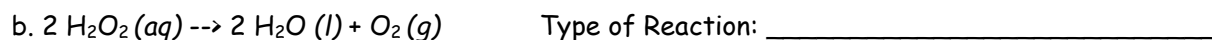
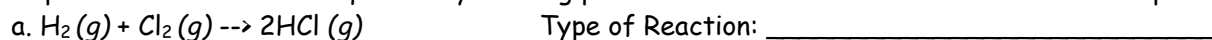
Section 1D - Review

Remember your diatomic elements! Remember what they are and what that means. Remember to apply it when writing chemical equations!

1) What does it mean to be a diatomic element?

2) List the diatomic elements.

3) Represent each chemical equation by drawing particulate-level models of the reactants and products.



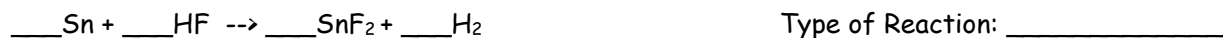
4) Write chemical equations that represent these word equations:

a. Baking soda (NaHCO_3) reacts with hydrochloric acid (HCl) to produce sodium chloride, water, and carbon dioxide.

b. During respiration, one molecule of glucose ($\text{C}_6\text{H}_{12}\text{O}_6$) reacts with six molecules of oxygen gas to produce six molecules of carbon dioxide and six molecules of water.

5) Balance the following equations:

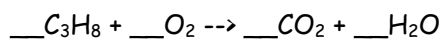
a. The preparation of tin(II) fluoride, a component of some toothpastes (called *stannous fluoride* in some ingredient lists):



b. The neutralization of hydrogen phosphate by calcium hydroxide:



c. Burning of propane:



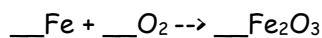
Type of Reaction: _____

d. Heating potassium chlorate:



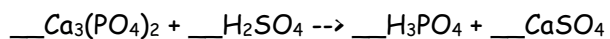
Type of Reaction: _____

e. Rusting (oxidation) of iron metal:



Type of Reaction: _____

f. Preparing phosphoric acid (used in making soft drinks, detergents, and other products) from calcium phosphate and sulfuric acid:



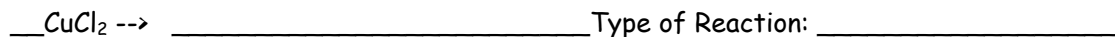
Type of Reaction: _____

6) Complete the equations by predicting the products and balancing the equations. Then, identify the type of reaction.

a. burning on octane, C_8H_{18} , a component in gasoline.



b. The breakdown of copper chloride:



c. The reaction of an antacid with stomach acid (hydrochloric acid):



d. The breakdown of water:

