Identifying Reactants and Products/Law of Conservation of Mass

Identify the reactants and products in the following examples.

1. $2 \text{ Na} + \text{Cl}_2 \rightarrow 2 \text{NaCl}$

Reactants: _____

Products: _____

2. $6CO_2 + 6H_2O + Light Energy \rightarrow C_6H_{12}O_6 + 6O_2$

Reactants:

Products: _____

3. When crystalline $C_6H_{12}O_6$ is burned in oxygen, carbon dioxide and water vapor are formed.

Reactants: _____

Products: _____

4. When lithium hydroxide pellets are added to a solution of sulfuric acid, lithium sulfate and water are formed.

Reactants:

Products:

5. When baking soda and vinegar are added together, water, carbon dioxide and salt are formed.

Reactants: _____

Products: _____

6. Acid rain is formed when rain water mixes with sulfur dioxide gas.

Reactants: _____

Products:

7. $2NaBr + Ca(OH)_2 \rightarrow CaBr_2 + 2NaOH$

Reactants: _____

Products: _____

8. $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + Chemical Energy$

Reactants: _____

Products: _____

Reactants:	Products:
10. When lead nitrate is added to sodium chloride Reactants:	a white precipitate is formed. Products:
Solve each of the following remember the law of	conservation of mass: Mass of reactants=Mass of products
11. A 10.0 g sample of magnesium reacts with oxygen to reacted?	o form 16.6 g of magnesium oxide. How many grams of oxygen
12. From a laboratory process designed to separate was hydrogen and 79.4 g of oxygen. How much water was o	ater into hydrogen and oxygen gas, a student collected 10.0 g of originally involved in the process?
	ctor supplied with an excess quantity of chloride gas. When the sodium chloride. How many grams of chloride gas reacted? How
	of liquid bromine to form aluminum bromide. After the reaction, ained unreacted. How many grams of bromine reacted? How
15. A 3.5 kg iron shovel is left outside through the winter spring. Its mass is 3.7 kg. How much oxygen combined with the spring of the spring	er. The shovel, now orange with rust, is rediscovered in the with the iron?
16. When 5.0 g of tin reacts with hydrochloric acid, the How many grams of hydrochloric acid were used?	mass of the products, tin chloride and hydrogen, totals 8.1 g.

9. HCl and NH_3OH are made when water is added to NH_3Cl .