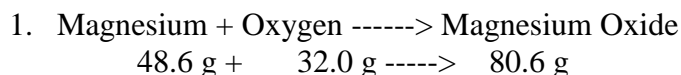
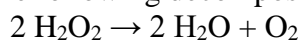


Science 10 Conserving Mass



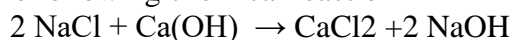
- A. What is the total mass of the product? _____
B. What is the total mass of reactants? _____
C. Does this experimental data support the Law of Conservation of Mass? Explain.
-

2. Consider the following decomposition reaction



If 72 grams of water and 64 grams of oxygen are produced, what mass of H_2O_2 decomposed?

3. Consider the following chemical reaction



If the mass of NaCl reacted is 191 grams and calcium hydroxide 74 grams and 80 grams of sodium hydroxide is produced, what mass of calcium chloride is produced?

4. If 50 grams of sodium reacts with chlorine to form 126 grams of salt. How many grams of chlorine reacted?

5. If 178.8 g of water is separated into hydrogen and oxygen gas, and the hydrogen gas has a mass of 20.0 g. What is the mass of the oxygen gas produced?

6. From a laboratory process, a student collects 28.0 g of hydrogen and 224.0 g of oxygen. How much water was originally involved in the process?

7. A 10 gram sample of iron reacts with oxygen to form 18.2 grams of ferric oxide. How many grams of oxygen reacted?

8. A liquid has a mass of 55g. When it is mixed with a solution, a chemical reaction occurs. If the final total mass of products is 135g what was the mass of the solution?

9. Solution A has a mass of 45g. Solution B has a mass of 62g. When they are mixed, a chemical reaction occurs in which gas is produced. If that mass of the final mixture is 95g, what mass of gas was produced?

10. In an experiment 25g of magnesium reacts with 73g of hydrogen chloride to produce a gas and 95g of magnesium chloride.

- a. How much gas was produced?