

Law of Conservation of Mass
Worksheet
Chemistry

Name: _____
Period: _____
Date: _____

- 1) Use the LAW OF CONSERVATION OF MASS to fill out the missing information in the table below. Use the example #1 as a guide.

Mass of Reactants = Mass of Products

Reaction	Reactant(s)		Product(s)	
1)	H ₂	O ₂	H ₂ O	
mass	3.4g	10g	13.4g	
2)	CH ₄	O ₂	CO ₂	H ₂ O
mass	12.2g	14g		20.0g
3)	HgO		Hg	O ₂
mass	23.6g			13.0g
4)	Li	O ₂	Li ₂ O	
mass		5.7g	24.6g	
5)	C ₃ H ₆	O ₂	CO ₂	H ₂ O
mass	18.9g	11.1g		15.6g
6)	Al(OH) ₃		Al ₂ O ₃	H ₂ O
mass			21.8g	9.7g

- 2) Answer the word problems below using the LAW OF CONSERVATION OF MASS. SHOW ALL WORK AND INCLUDE UNITS !!!!

a) Hydrogen and oxygen react chemically to form water. How much water would form if 14.8 grams of hydrogen reacted with 34.8 grams of oxygen? ($\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$)

b) When ammonium nitrate (NH_4NO_3) explodes, the products are nitrogen, oxygen, and water. When 40 grams of ammonium nitrate explode, 14 grams of nitrogen and 8 grams of oxygen form. How many grams of water form? ($\text{NH}_4\text{NO}_3 \rightarrow \text{N}_2 + \text{O}_2 + \text{H}_2\text{O}$)