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_2O	■
mass	3.4g	10g	13.4g	■
2)	CH_4	O_2	CO_2	H_2O
mass	12.2g	14g		20.0g
3)	HgO	■	Hg	O_2
mass	23.6g	■		13.0g
4)	Li	O_2	Li_2O	■
mass		5.7g	24.6g	■
5)	C_3H_6	O_2	CO_2	H_2O
mass	18.9g	11.1g		15.6g
6)	$Al(OH)_3$	■	Al_2O_3	H_2O
mass		■	21.8g	9.7g

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

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? ($H_2 + O_2 \rightarrow H_2O$)

b) When ammonium nitrate (NH4NO3) 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? ($NH_4NO_3 \rightarrow N_2 + O_2 + H_2O$)