Name:_____ **Period:**_____

Law of Conservation of Mass Worksheet

1. Define the law of conservation of mass in your own words:

   _____

   _____

2. According to the LOCO mass, the mass of reactants and products are _____

   _____

3. Use the LAW OF CONSERVATION OF MASS to fill out the missing information in the table below.   Mass of Reactants = Mass of Products

Reaction	Reactant(s)			Product(s)		
A)	H_2	+	O_2 →	H_2O		
mass	3.4g		10g			
B)	CH_4	+	O_2 →	CO_2	+	H_2O
mass	12.2g		14g			20.0g
C)		HgO	→	Hg	+	O_2
mass		23.6g				13.0g
D)	Li	+	O_2 →	Li_2O		
mass			5.7g	24.6g		

**4-5 Answer the word problems using the LAW OF CONSERVATION OF MASS.
SHOW ALL WORK AND INCLUDE <u>UNITS</u> !!!!**

4. Hydrogen & oxygen react chemically to form water. How much water would form if 14.8 grams of hydrogen reacted with 34.8 grams of oxygen? ($H_2 + O_2$ → H_2O)

5. A solid mass of 25 g is mixed with 60 g of a solution. A chemical reaction takes place and a gas is produced. The final mass of the mixture is 75 g. What is the mass of the gas released?

Law of Definite Proportions Worksheet

1. Define the law of definite proportions in your own words:

_____

_____

_____

2. According to the LODP, complete the following table:

Compound	Carbon Mass	Oxygen Mass	Hydrogen Mass
H_2O	X	16 g	
CO_2	12 g		X
CH_4		X	4 g
$C_6H_{12}O_6$			12 g

3. According to the LODP, complete the following table (*HINT: you might want to find the ratios from the table above)

Compound	Carbon Mass	Oxygen Mass	Hydrogen Mass
H_2O	X	32 g	
CO_2	6 g		X
CH_4		X	10 g
$C_6H_{12}O_6$			36 g

Law of Multiple Proportions Worksheet

1. Define the law of definite proportions in your own words:

_____

_____

_____

2. If I have 2 g of carbon, how many grams of oxygen will be in CO and CO_2?

CO _____ g

CO_2 _____ g

3. If I have 3 g of hydrogen, how many grams of oxygen will be in H_2O and H_2O_2?

H_2O _____ g

H_2O_2 _____ g