Chemistry
Peterson

Percent Composition
WS 10E

Name: _____
Period:

Directions: Show all work. Label all units. All answers must show correct significant figures.

1. A compound analyzed in a chemistry lab consists of 5.34 g carbon, 0.42 g of hydrogen, and 47.08 g of chlorine. What is the percent composition of this compound?

%C = _____

%H = _____

%Cl = _____

2. Find the percent composition of a compound containing tin and chlorine if 18.35 g of the compound contains 5.74 g tin.

%Sn = _____

%Cl = _____

3. 3.907 g of carbon combines completely with 0.874 g of hydrogen to form a compound. What is the percent composition of this compound?

%C = _____

%H = _____

4. What is the percent composition of the elements in sodium cyanide, NaCN?

%Na = _____

%C = _____

%N = _____

5. What is the percent composition of the elements in sodium cyanide, $(NH_4)_2CO_3$

%N = _____

%H = _____

%C = _____

%O = _____

6. From the formula for calcium acetate, $Ca(C_2H_3O_2)_2$, calculate the mass of carbon that can be obtained from 65.3 g of the compound. *Show dimensional analysis steps!*

mass C = _____

7. How many grams of aluminum are there in 25.0 g of aluminum oxide? *Show dimensional analysis steps!*

mass Al = _____

8. How many grams of iron are there in 21.6 g of iron (III) oxide? *Show dimensional analysis steps!*

mass Fe = _____