

Name \_\_\_\_\_

## Percent Composition

Solve the following percent composition problems:

- 1) Find the percentage composition of a compound that has 2.665g of carbon, 0.785g Hydrogen, and 1.55g nitrogen in a 5.00 gram sample.  
**53.3%C    15.7%H    31.0%N**
- 2) A sample of an unknown compound has a mass of 1.852g. What is the mass of each element in the compound if the percent composition is 44.99 percent carbon, 7.570 percent hydrogen, and 47.45 percent fluorine?  
**0.8332gC    0.1402gH    0.8788gF**
- 3) Find the percentage composition of a compound that has 1.12g nitrogen, 0.320g hydrogen, 0.48g carbon, and 1.92g oxygen in a 3.84g sample.  
**29.17%N    8.33%H    12.50%C    50.0%O**
- 4) What is the percent composition of each element in the compound  $K_2SO_4$ ?  
**44.88%K    18.40%S    36.72%O**
- 5) What is the mass of each element contained in a 2.62g sample of magnesium phosphate?  
**0.727gMg    0.617gP    1.276gO**
- 6) What is the mass of each element contained in a 6.33g sample of calcium hydroxide?  
**3.42gCa    0.173gH    2.73gO**
- 7) What is the percent composition of water in copper(II)sulfate pentahydrate?  
**36.1% H<sub>2</sub>O**
- 8) Using percent composition, determine how many atoms of oxygen are present in a 8.93g sample of sodium bicarbonate.  
**1.92x10<sup>23</sup> atoms O**
- 9) Using percent composition, determine how many grams of glucose you have if there are  $4.23 \times 10^{24}$  atoms of carbon in it.  
**211g C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>**