Chemistry 141 Name

Dr. Cary Willard

Quiz 2a (20 points) February 11, 2014

1. (6 points) How do the properties of compounds compare to the properties of the elements from which they are composed?
2. (7 points) Combustion analysis of 5.000 g of an organic compound produced 12.21 g of carbon dioxide and 4.999 grams of water. The compound contains C,H, and O. Calculate the empirical formula of the compound.
3. (7 points) A metal (M) forms a compound with the formula MCl2. Of the compound contains 58.19% Cl by mass, what is the identity of the metal?

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Quiz 2b (20 points) February 11, 2014

1. (6 points) How do the properties of compounds compare to the properties of the elements from which they are composed?
2. (7 points) Combustion analysis of 5.000 g of an organic compound produced 9.991 g of carbon dioxide and 4.089 grams of water. The compound contains C,H, and O. Calculate the empirical formula of the compound.
3. (7 points) A metal (M) forms a compound with the formula MCl2. Of the compound contains 54.71% Cl by mass, what is the identity of the metal?