Chemistry 141 Name

Dr. Cary Willard

Quiz 2c (20 points) February 13, 2013

1. (3 points) Give the correct IUPAC name for each of the following compounds.
   1. Ni(ClO4)2
   2. SiO2
   3. H2SO4
2. (3 points) Write the correct formula for each of the following compounds.
   1. Titanium(II) phosphide
   2. Lithium borate
   3. Cupric nitrate
3. (4 points) Calculated the number of gold atoms in a solid gold ring with a volume of 1.05 mL. the density of gold is 19.4 g/mL.
4. (2 points) Determine the number of protons and neutrons in tungsten-187.
5. (8 points) Amino acids, the building blocks of proteins are composed of carbon, hydrogen, nitrogen, and oxygen. When a 0.4275 g sample of the amino acid lysine is burned in oxygen 0.4141 g of water and 0.8671 g of carbon dioxide are produced. All of the nitrogen in a second sample with a mass of 2.513 g was converted into 0.6576 g of ammonia. Use this data to determine the empirical formula of lysine.

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Quiz 2d (20 points) February 13, 2013

1. (3 points) Give the correct IUPAC name for each of the following compounds.
   1. V(BrO)3
   2. H3PO4
   3. Br2O8
2. (3 points) Write the correct formula for each of the following compounds.
   1. Calcium carbonate
   2. Ferric sulfide
   3. Potassium permanganate
3. (4 points) Calculated the number of gold atoms in a solid gold ring with a volume of 2.31 mL. the density of gold is 19.4 g/mL.
4. (2 points) Determine the number of protons and neutrons in molybdenum-98.
5. (8 points) Amino acids, the building blocks of proteins are composed of carbon, hydrogen, nitrogen, and oxygen. When a 0.4275 g sample of the amino acid histidine is burned in oxygen 0.2233 g of water and 0.7275 g of carbon dioxide are produced. All of the nitrogen in a second sample with a mass of 2.513 g was converted into 0.8276 g of ammonia. Use this data to determine the empirical formula of histidine.