Chemistry 115 Name

Dr. Cary Willard

Quiz 5A (20 points) March 12, 2009

All work must be shown to receive credit. Avogadro’s number 6.022 x 1023/mol

1. (3 points) Calculate the molar mass of aspartame, (C8H10N4O2)
2. (3 points) Calculate the mass of 5.77 moles of aspartame.
3. (3 points) Calculate the number of moles of carbon in 9.17 moles of aspartame.
4. (3 points) Calculate the mass of 8.47 x 1018 molecules of aspartame.
5. (3 points) Balance the following equation

2 AgNO3 + Cu 🡪 Cu(NO3)2 + 2 Ag

1. (5 points) Determine the empirical formula of a compound that is composed of 69.9% iron and 30.1% oxygen.

Chemistry 115 Name Key

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Quiz 5B (20 points) March 12, 2009

All work must be shown to receive credit. Avogadro’s number 6.022 x 1023/mol

1. (3 points) Calculate the molar mass of aspartame, (C14H18N2O5)
2. (3 points) Calculate the mass of 5.77 moles of aspartame.
3. (3 points) Calculate the number of moles of carbon in 9.17 moles of aspartame.
4. (3 points) Calculate the mass of 8.47 x 1018 molecules of aspartame.
5. (3 points) Balance the following equation

2 AgNO3 + Ni 🡪 Ni(NO3)2 + 2 Ag

1. (5 points) Determine the empirical formula of a compound that is composed of 72.4% iron and 27.6% oxygen.