Chemistry 115 Name

Dr. Cary Willard

Quiz 6A (20 points) March 16, 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 3.64 moles of aspartame.
3. (3 points) Calculate the number of moles of carbon in 2.97 moles of aspartame.
4. (3 points) Calculate the mass of 3.87 x 1018 molecules of aspartame.
5. (3 points) Balance the following equation

2 AgNO3 + Cu 🡪 Cu(NO3)2 + 2 Ag

1. (5 points) Given the following chemical equation, answer the questions

CS2 + 3 Cl2 🡪 CCl4 + S2Cl2

* 1. How many moles of Cl2 will react with 5.23 moles of CS2?
  2. How many grams of CCl4 can be made from the reaction of 10.0 grams of Cl2 with excess CS2?

Chemistry 115 Name Key

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Quiz 6B (20 points) March 16, 2009

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1. (3 points) Calculate the molar mass of aspartame, (C14H18N2O5)
2. (3 points) Calculate the mass of 3.87 moles of aspartame.
3. (3 points) Calculate the number of moles of carbon in 2.04 moles of aspartame.
4. (3 points) Calculate the mass of 5.97 x 1018 molecules of aspartame.
5. (3 points) Balance the following equation

2 AgNO3 + Ni 🡪 Ni(NO3)2 + 2 Ag

1. (5 points) Given the following chemical equation, answer the questions

CS2 + 3 Cl2 🡪 CCl4 + S2Cl2

1. How many moles of Cl2 will react with 3.87 moles of CS2?
2. How many grams of CCl4 can be made from the reaction of 15.0 grams of Cl2 with excess CS2?