Chemistry 115 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Quiz 4a

Dr. Cary Willard March 5, 2014

Avogadro’s number = 6.022 x 1023/mol

1. (4 points) How many airplanes are in a fleet of 5.28 x 10-22 mol airplanes?
2. (4 points) What is the mass in grams of 0.539 moles of tungsten(W)?
3. (4 points) If you have 5.25 x 1025 atoms of titanium(Ti), how many moles of Ti do you have?
4. (4 points) What is the molar mass of chromium(II) nitrate, Cr(NO3)2?
5. (4 points) How many atoms of oxygen are in 16 formula units of chromium(II) nitrate?

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Quiz 4b

Dr. Cary Willard March 5, 2014

Avogadro’s number = 6.022 x 1023/mol

1. (4 points) How many airplanes are in a fleet of 6.84 x 10-22 mol airplanes?
2. (4 points) What is the mass in grams of 0.364 moles of tungsten(W)?
3. (4 points) If you have 3.75 x 1025 atoms of titanium(Ti), how many moles of Ti do you have?
4. (4 points) What is the molar mass of chromium(III) nitrate, Cr(NO3)2?
5. (4 points) How many atoms of oxygen are in 11 formula units of chromium(III) nitrate?

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Quiz 4c

Dr. Cary Willard March 5, 2014

Avogadro’s number = 6.022 x 1023/mol

1. (4 points) If you collect 7.24 x 104 seashells, how many moles of seashells do you have?
2. (4 points) What is the mass in grams of 0.387 moles of osmium (Os)?
3. (4 points) How many atoms of selenium(Se) are in 8.20 mol of selenium?
4. (4 points) What is the molar mass of cobalt(III) chlorate, Co(ClO3)3?
5. (4 points) How many atoms of oxygen are in 24.0 formula units of cobalt(III) chlorate?

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Quiz 4d

Dr. Cary Willard March 5, 2014

Avogadro’s number = 6.022 x 1023/mol

1. (4 points) If you collect 4.87 x 104 seashells, how many moles of seashells do you have?
2. (4 points) What is the mass in grams of 0.834 moles of osmium (Os)?
3. (4 points) How many atoms of selenium(Se) are in 3.24 mol of selenium?
4. (4 points) What is the molar mass of cobalt(II) chlorate, Co(ClO3)2?
5. (4 points) How many atoms of oxygen are in 17.0 formula units of cobalt(III) chlorate?