**Mini-quiz #2 Chemistry 1114 section 2 (Fong) Friday 31 August 2012 A**

Your name:\_\_\_\_\_\_\_\_\_answers\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.1. Write the decimal equivalent of 10-5 : \_\_\_\_\_0.00001\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.2. If the radius of a nucleus is taken to be 1, the radius of an electron orbit is ~ \_\_105=100,000 (a number)

2.3. Where is most of the mass in the Bohr atom ? \_\_\_**\_nucleus**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.4. The head of a pin is about 1\*10-5 meters across. Which item below is 10,000 bigger in length ?

a) pencil= 0.1 meters in length

b) garden hose= 100 meters in length

c) meter stick = 1 meter in length

d) Earth’s orbital radius around Sun ~ 109 meters

e) Distance down a short driveway = 10 meters

**Mini-quiz #2 Chemistry 1114 section 2 (Fong) Friday 26 August 2011 B**

Your name:\_\_\_\_\_answers\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.1. Write the decimal equivalent of 10-4 : \_\_\_\_\_0.0001\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.2. If a baseball is assumed to be a nucleus and sitting on the pitcher’s mound in Yankee stadium, about how far away is the electron from the nucleus ? \_\_\_\_4-5 miles\_\_\_\_\_\_\_\_\_\_

2.3. The head of a pin is about 1\*10-5 meters across. Which item below is 10,000 bigger in length?

a) pencil= 0.1 meters in length

b) garden hose= 100 meters in length

c) meter stick = 1 meter in length

d) Earth’s orbital radius around Sun ~ 109 meters

e) Distance down a short driveway = 10 meters

2.4. What is the ~ ratio of the diameter of an electronic orbit to the diameter of the nucleus? \_100,000/1\_\_

**Mini-quiz #2 Chemistry 1114 section 2 (Fong) Friday 26 August 2011 C**

Your name:\_\_\_\_\_\_\_answers\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.1. Write the decimal equivalent of 10-3: \_\_\_\_\_0.001\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.2. The head of a pin is about 1\*10-5 meters across. Which item below is 10,000 bigger in length ?

a) pencil= 0.1 meters in length

b) garden hose= 100 meters in length

c) meter stick = 1 meter in length

d) Earth’s orbital radius around Sun ~ 109 meters

e) Distance down a short driveway = 10 meters

2.3. What is the ~ ratio of the diameter of an electronic orbit to the diameter of the nucleus? \_100,000/1\_\_

2.4 If a Target store in Omaha is the nucleus, about where does the orbit of an electron start? \_London, England