PRACTICE QUIZ ASSIGNMENT _CHE101 SUMMER 2020 (CHAPTER 1 & 2, THIS IS A GUIDELINE NOT ACTUAL QUESTIONS) (TO SOLVE CONSULT YOUR CHAPTER PPTS & BOOKS)

- 1. (1 point) Express 0.000 000 000 064 7 in scientific notation.
- 2. (1 point) Rewrite 5.16 x 10⁸ in a non-exponential form.
- 3. (2 = 1 point each) how many significant figures are suggested in the values below?
 - a) 0.005 008 00 # sig figs = ______ b) 4 300 # sig figs = _____
- 4. (2 points) perform the following calculation. Express your answer in **scientific notation** and **with an appropriate number of significant figures**.

$$\frac{6.23 \times 10^{-4}}{\left(5.1 \times 10^{2}\right)\left(3.49 \times 10^{8}\right)} =$$

- 5. (1 point) How many gigabytes are equal to 4.5×10^{11} bytes? (HINT: 1 Gbyte = 10^9 bytes)
- 6. (1 point) If 1.00 noggin (a British unit) is equivalent to 142 cm³, how many noggins are there in 524 cm³?
- 7. (2 point) Dry ice goes from the solid to the gas state at -80.5 °C. What is the equivalent temperature in °F and K?
- 8. how many neutrons are found in the **nucleus** of 'X' atom?
- 9. (1point) what atom has **X-number** of protons?
- 10. (1point) How many electrons are present in an ion, X^{n+} ?
- 11. (1point) what is the proper isotopic notation for a +3 ion of an atom?
- 12. (1point) who gathered the current understandings of science into the **atomic theory/Proton/Ionic** of matter? (Circle one)
- 13. (1points) to which category of elements does Y belong? (Circle one)
- 14. (2 points) calculate the average atomic mass of an element who's naturally occurring isotopes are **X% of A amu** atoms and **Y% of B amu** atoms.
- 15. (2 points) someone is watching his blood sugar (glucose) to prevent the onset of diabetes. Overnight-fasting reading Friday was **X** mg/dL (Any value less than 100 is considered normal!) What is this level of glucose expressed as g/L?