Week 5

INFORMATION FOR THE WEEK OF Feb 18

Read/pre-lecture problems ahead: Chapter 3: 3.5, 3.6, 3.7

Tuesday, Feb 19

Lecture— Chapter 3: Stoichiometry: Calculations with Chemical Formulas and Equations
Lab— Review in lab. Not mandatory; if you choose not to attend the review, consider using this time an open study hour. Work is still due. Review starts at 1:00 pm and continues to 4:00 pm

Thursday, Feb 21

Lecture—EXAM 1: Exam 1 will cover Chapter 1, 2 (excluding nomenclature), 3.1-3.4, 7.6-7.8 [for these sections, ignore specific reactions, ionization energies, and electron configurations. Focus on the text; the information there in has been covered to some extent in lecture. 7.6: Table 7.3, Pages 273-275, definition of compounds, characteristic of metal oxides, sample exercise 7.8a, 276 non-metals, 277- 278-metalloids. 7.7 & 7.8: Read for meaning and context. Table 7.4-Why do you think the density of lithium is lower than the density of cesium? What is an allotrope? Do they have the same physical and chemical properties? What are the allotropes of carbon? Why do you think the radius of the atoms tends to increase with atomic number? 10.1 Characteristics of gases; 11.1 A molecular comparison of gases, liquids, and solids.(Figure 11.2 is a good summary), Table 11.1 was covered in class in a handout. 11.2, page 438 to the top of page 439. You do not need to know HOW the forces are created or the criteria of the forces, although a little pre-reading is good. What are the three types of intermolecular attractions that exist between electronically neutral molecules? What is the relationship between intermolecular forces and boiling and melting points?
I would suggest you look at the objectives for Chapters 1, 2, and 3
Lab—No lab

Handouts from the website I might use during lecture:

- I passed out several handouts last week. Please bring them. [mole concept problems, combustion problems, empirical formula worksheet]

The following assignments are due

Lab: Exp. 3: Using physical properties to identify and unknown liquid-You will need a pre-lab. (2/19)
Exp. 6-Thermal Decomposition of sodium bicarbonate (2/28)
Mastering: 2/15: Nomenclature prefixes dynamic study module; **2/18**: HW 02 2.7, PL 07 3.1-3.4
2/19: HW CH 02 2.8-2.9, PL #05 2.5-2.7, PL #06 2.8-2.9
Canvas: How to use your calculator-Part 2 (2/12), Evaluation of a result statement (2/14).

The following assignments are past due.

- **Lab:** Exp. 2: Density of a metal (2/12); Density of copper pennies graph (2/14); Graduated Cylinder Handout (2/12),

- **Mastering: 2/11**: KGCS-Intermolecular forces, PL #05 2.5-2.7, PL #06 2.8-2.9; **2/12**: HW CH 02 2.1-2.4; **2/13** HW 02 2.5-2.6, HW 07 7.6-7.8, PL 07 3.1-3.4; **2/14** KGCS-Metric Prefixes
- **Other:** How to use your calculator-part 1 (2/12), Web assignment (2/12)

Additional announcements

- Assignments from the first 3 weeks of school (orientation etc) except for show your ID, will not be extended.
- My office hours have changed:
  - Tuesday and Thursday: 4:30-6:30 A236
  - Wednesday: Tower 7th floor 4:00-5:00, I leave sharply at 5.
  - Friday: Tower 7th floor 10:30-11:30. I leave sharply at 11:30 for meetings. If there are any changes in the location, I will send an email through Canvas.

THE EXAM IS THIS WEEK. THE PRACTICE EXAM IS LONELY. TAKE IT OUT TO LUNCH! THERE ARE TWO PRACTICE EXAMS: LAST SEMESTER AND SPRING SEMESTER. WHEN I POST THE EXAM ANSWERS, THE EXAMS WILL MOVE.