**Homework #2: Chemistry 1013 Spring 2012**

**Due Wednesday 6 February 23 pts**

1. **Use Figure 1.20 to classify the materials below**
2. **A cup of green tea (no leaves) b) Baking soda c) fresh cow’s milk**
3. **Given the elements and atom counts below, write the conventionally accepted compound formula for the combinations given: a)1 N + 2 O b) 1 Si + 6 O + 2 C c) 4 O + 1 P + 1 Fe d) 2 C + 6H + 1 O**
4. **Given the unbalanced reaction shown here: 2C4H10 + \_\_\_ O2 🡪 8CO2 + 10H2O**
5. **Supply the correct coefficient for O2 to balance the reaction**
6. **How many H atoms are involved in the balanced reaction ?**
7. **Decide whether the bonding between the elements below will be ionic or covalent.**

**(refer to Figure 2.9 ) a)N + O b) H + F c) Cs + Cl d) P + S**

1. **Write down in correct compound format the most likely formula for a compound composed of: a)Ca + F b) K + P c) Sc + O d) Mg + N e) Na + S**
2. **What specific group do each of the elements below belong to ? (refer to Figure 2.3)**
3. **Na b) Fe c) Ba d) Cl e) Kr f) U**

**Homework #2: Chemistry 1013 Spring 2012**

**Due Monday 30 January 23 pts**

1. **Use Figure 1.20 to classify the materials below**
2. **A cup of green tea (no leaves) b) Baking soda c) fresh cow’s milk**
3. **Given the elements and atom counts below, write the conventionally accepted compound formula for the combinations given: a)1 N + 2 O b) 1 Si + 6 O + 2 C c) 4 O + 1 P + 1 Fe d) 2 C + 6H + 1 O**
4. **Given the unbalanced reaction shown here: 2C4H10 + \_\_\_ O2 🡪 8CO2 + 10H2O**
5. **Supply the correct coefficient for O2 to balance the reaction**
6. **How many H atoms are involved in the balanced reaction ?**
7. **Decide whether the bonding between the elements below will be ionic or covalent.**

**(refer to Figure 2.9 ) a)N + O b) H + F c) Cs + Cl d) P + S**

1. **Write down in correct compound format the most likely formula for a compound composed of: a)Ca + F b) K + P c) Sc + O d) Mg + N e) Na + S**
2. **What specific group do each of the elements below belong to ? (refer to Figure 2.3)**
3. **Na b) Fe c) Ba d) Cl e) Kr f) U**