Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
**Reading Guide: 3.1 Introduction to the Periodic Table and 3.2 Representative Elements  
  
3.1 (p. 64-71)**

1. What did Moseley do to improve the periodic table? How was this different than Mendeleev’s method? (p. 65)
2. Mendeleev left blank spaces on his version of the periodic table but predicted the properties of these missing elements. Were his predictions close? (p. 65)
3. What is a period on the periodic table? (p. 65)
4. What is the atomic mass of Boron? (p. 66-67)
5. What state of matter is Tellurium in at room temperature? (p. 66-67)
6. What is the chemical symbol for Potassium? (p. 66-67)
7. What is the atomic mass of Zinc? (p. 66-67)
8. What is a group in the periodic table? (p. 68)
9. How many sections can the periodic table be divided into? What are these sections? (p. 68)
10. What is one characteristic of metal? Nonmetal? Metalloid? (p. 60-70)  
    Metal:

Nonmetal:

Metalloid:

1. On the periodic table, what symbol is used to describe an element that is synthetic? (p.70)
2. Why don’t the chemical symbols always match the names of elements? (p. 71)
3. What are the symbols Uun, Uuu, and Uub? (p. 71)
4. Where are the metals located in the periodic table? (p. 66-67)
5. What is the chemical symbol for lead? What is the origin of this chemical symbol? (p. 71)  
     
     
   **3.2 Representative Elements**
6. What is the family name for Group 1 elements? What are some characteristics of this family? (p. 72)

1. What is one useful purpose for the activity of the alkali metals? (p. 73)
2. What is the name of Group 2? What are some characteristics of this family? Examples? (p. 74)

1. Define alloy. (p. 74)
2. What is special about the Boron’s family element, Gallium? (p. 75)
3. What group is the Carbon Group? Why is gasoline unleaded? (p. 76)
4. What is the name of Group 15? Why is the white phosphorous submerged in a liquid in picture C of Figure 3-12? (p. 77)
5. What is sulfur used to manufacture? What family does sulfur belong to? (p. 78)
6. What does halogen mean? What Group and Family are these found? (p. 80)
7. Why are elements in Group 18 called the noble gases? (p.81)

1. Why is helium preferred over hydrogen to fill balloons? (p. 81)

1. What happens when you mix argon, krypton and xenon in a light bulb? (p. 82)
2. Where is radon found? How is it harmful? (p. 82)
3. What happened in 1962 that made the statement, “noble gases are inert gases”, false? (p. 81-82)
4. What color does helium glow when electricity is passed through it? (p. 81)