U5-14 Bonding Writing Practice 11/22/2013

In a well-developed writing, compare and contrast ionic and covalent bonding. Be sure to:

- Define ionic and covalent bonding.
- Explain why atoms bond and identify the types of elements found in each type of bond.
- Select appropriate elements from the periodic table to show both types of bonding using Lewis dot diagrams, Lewis structures, and structural formulas.
- Provide the chemical names and formulas of the compounds you use as examples.

In a well-developed writing, explain polarity in terms of bonds and of molecules. Be sure to:

- Explain the difference between nonpolar (or pure) covalent bonds and polar covalent bonds.
- Classify the bonds in water and carbon tetrachloride as polar or nonpolar; then, classify these molecules as polar or nonpolar molecules. Draw Lewis structures to support your conclusion.
- Explain the role of electronegativity and molecular shape in determining polarity. Use the electronegativity chart on page 265 of the textbook to aid in your explanation.

Writing Guidelines

1. The writings should have clear introductions with thesis statements and meaningful conclusions.
2. Write objectively; avoid using personal pronouns and people as the subjects of your sentences.
3. Use your drawings (Lewis dot diagrams, Lewis structures, structural formulas) as documents and refer to them in your writing using the proper Gateway method for referencing sources.
4. Use scientific vocabulary.
5. Craft thorough explanations; for every statement, provide at least two supporting statements of detail.