**Honors Chemistry- Chapters 7-8 Objectives and Questions**

**\*\*Chapter 9 will be handled IN CLASS\*\***

On a separate sheet of paper, complete the following objectives. These objectives need to *be handwritten* and thorough. Do not forget to complete the *questions* at the bottom.

**Chapter 7- Ionic and Metallic Bonding**

**(Read through chapter 7)**

7.1.1 List out how to determine the number of valence electrons in an atom in the *s* or *p* sublevel

7.1.2 Explain how the octet rule applies to metallic and nonmetallic elements

7.1.3-4 Describe how cations and anions form

7.2.1 Explain the electrical charge of an ionic compound

7.2.2 Describe 3 properties of ionic compounds

7.3.1 Describe what is meant by “sea of electrons”

**Chapter 8- Covalent Bonding**

**(Read through chapter 8 to assist you with the following)**

8.1.1 Distinguish between some properties of ionic and covalent compound (i.e. melting/boiling point).

8.1.2 Describe a molecular formula and what it represents.

8.2.1 Describe how electrons are shared to form covalent bonds and identify exceptions to the octet rule

8.2.2 Explain the difference between single, double and triple covalent bonds.

8.3.1 Define VSEPR Theory and explain how it relates to molecular shape.

8.4.1 Describe how electronegativity values determine the distribution of charge in a polar molecule.

8.4.2 List the 3 different intermolecular attraction forces.

8.4.3 Evaluate the strength of intermolecular attractions compared with the strength of ionic and covalent bonds

In addition, the following chapter problems are required. These can be found at the end of each chapter (For any problems that require a calculation, make sure you show your work!!)

Chapter 7 (chapter questions: 31, 33, 37, 38, 41, 43, 44, 48, 67, 73)

Chapter 8 (chapter questions: 39, 40, 41, 43, 44, 57, 58, 59)

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