**Chapter 8 Blue Sheet**

The majority of topics in chapter 8 are review topics. It is of utmost importance that you understand the concepts of this chapter both in context of passing this class, and the AP exam, but also in understanding chemistry. Make sure to ASK questions! Make sure to read deeply and work to understand the topics addressed.

What are the three main types of chemical bonds?

What is a Lewis symbol?

Fill in the boxes below with 20 Lewis symbols that are not in the book- (Write Clearly)

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State the octet rule in your own words-

In a short paragraph explain the process of ionic bonding by describing the bond formed between magnesium and two Bromium atoms. Please include drawings and any other necessary information.

What is lattice energy?

What governs the strength of the lattice energy?

Why is the lattice energy larger for sodium fluoride than sodium chloride?

Why is the lattice energy larger for Sodium fluoride than potassium fluoride?

Why is the lattice energy larger for Magnesium chloride than sodium chloride?

Give the electron configuration for the following ions-

F- Ca+2

O-2 Sc+1

V+3 Fe+3

Covalent Bonding-

What are the main differences between ionic and covalent bonding?

In a short paragraph explain the process of covalent bonding by describing the bond formed between two bromine atoms. Please include the Lewis structure and any other necessary information.

In your own words describe what a Lewis structure is-

Using your review book, summarize the 5 rules of drawing Lewis structures-

Give the Lewis structure of the following compounds-

CO2 N2 CO3-2

Why do some compounds contain double and triple bonds and some do not?