

THESE NOTES ARE ALL DUE ON THURSDAY 1/16

Be brief and take notes only on what I list below.

Note-Taking Guide for Section 6.3 (p. 176-180)

Read through section 6.3 and use the list below to guide your note-taking.

Take notes on the following concepts or objectives:

- What are ionic compounds?
- Describe why ionic compounds form crystals.
- What are formula units? Give an example.
- In forming ionic compounds, what must the total charge of the compound be?
- How are ratios used to show balanced charges in ionic compounds (describe and give an example)?
- Give an example of how you can use electron dot notation to demonstrate the formation of an ionic compound.
- What is a crystal lattice?
- What is lattice energy?
- Make a T-chart to compare ionic vs. molecular bonding.
 - a. include strength, boiling point/melting point, conductivity, solubility, and state of matter.
- What are polyatomic ions? Give two examples.

Note-Taking Guide for Section 6.4 (p. 181-182)

Read through section 6.4 and use the list below to guide your note-taking.

Take notes on the following concepts or objectives:

- How is the movement of electrons in metallic bonding different from that in ionic and covalent bonding?
- Describe the Metallic-Bond Model, including the following details
 - a. What is special about the highest energy levels of metals?
 - b. Describe the p and d orbitals of most metals.
 - c. Describe what is meant by “delocalized” electrons.
 - d. Describe the “electron sea.”
 - e. Define *metallic bonding*.
- Describe why metals have high electrical and thermal conductivities.
- What is metallic luster and what causes metals to have a luster?
- Describe malleability and ductility.
- Describe how the atomic structure of metallic bonds gives metals the properties of ductile and malleable.