

Name: _____ Date: _____ Period: _____

AP Chemistry Chapter 7 Essentials Pt II

Lewis Dot Structures

1. When writing Lewis Structures, which element is usually chosen as the central atom?
2. What is meant by the formal charge on a polyatomic ion and what formal charge is the most energetically favorable?
3. What are the rules for determining formal charges?
4. What are the 4 limitations to the Octet Rule that can occur?
5. Give three Lewis Dot Structures of compounds that do not obey the Octet Rule.
6. What are resonance structures?

Polarity

7. What is the difference between a polar and nonpolar covalent bond?
8. What symbol is used to indicate a partial negative charge on a molecule? For a partial positive charge?
9. What does the word "dipole" mean?
10. Use the electronegativity values in Table 6-3 to rank the following single bonds from most polar to least polar: F-F, F-Cl, F-Br, Cl-Br, Cl-I, and Cl-Cl.
11. What is the dipole moment of a molecule?
12. Is a substance every really 100% ionic or 100% covalent? Explain your answer.