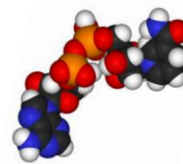


Name: _____ Date: _____
Chemistry

Worksheet

Metallic Bonding and Polarity



DIRECTIONS: Write the best term for each statement on the blank.

- | | |
|---|------------------------|
| _____ 1. a covalent bond in which the electrons are <u>shared equally</u> | A. bonding electrons |
| _____ 2. a <u>non-bonding</u> pair of electrons | B. coordinate covalent |
| _____ 3. an attraction between <u>metal cations</u> and <u>free</u> valence electrons | C. covalent bond |
| _____ 4. an attractive force by <u>sharing</u> electrons | D. ionic bond |
| _____ 5. electrons involved in <u>bonding</u> | E. polar bond |
| _____ 6. an attractive force by the <u>transfer</u> of electrons | F. lone pair |
| _____ 7. a covalent bond in which the electrons are <u>unequally shared</u> | G. metallic bond |
| | H. non-polar bond |

DIRECTIONS: List three characteristics of metals.

8. _____
9. _____
10. _____

DETERMINE which type of bond, (I)onic, (C)ovalent or (M)etallic, predominates in each:

_____ SnCl₄ _____ GeH₄ _____ CaF₂ _____ Fe₃Al _____ Na₂O _____ N₂H₄

DIRECTIONS: Tell whether the bond between these atoms is **polar** or **nonpolar**.

_____ C — C _____ S — F _____ O — H
_____ F — F _____ As — Cl _____ C — O

EXTRA CREDIT:

What is the driving force behind chemical bonding?

"It doesn't take any talent to hustle."