

Ch. 8 Chemical Bonding

- 1.) What type of bonding occurs when electrons are shared?
- 2.) What type of bonding occurs when electrons are transferred?
- 3.) What is the octet rule?
- 4.) What are the exceptions to octet rule?
- 5.) How many electrons are shared between two atoms in a triple bond?
- 6.) _____ is a measure of how equally or unequally the electrons in a covalent bond are shared.
- 7.) In a _____ bond, electrons are shared equally.
- 8.) In a _____ bond, one of the atoms attracts e⁻ to itself with greater force.

9.) Electronegativity _____ from left to right across a period on the periodic table

and _____ from bottom to top of a group on the periodic table

10.) Determine the number of total electrons in SiF_4

11.) Determine the number of total electrons in nitrogen trifluoride

12.) Which of the following is an example of a covalent bond?

- a) K - Cl
- b) Al - Cl
- c) H - Cl
- d) Al - Al

13.) Which of the following is an example of an ionic bond?

- a) Na - N
- b) N - N
- c) N - O
- d) O - H
- e) O - Si

14.) Which of the following is an example of a polar covalent bond?

- a) F - F
- b) H - F
- c) K - F
- d) Al - Al

15.) Draw the Lewis structure for the following ionic compounds

1.) NaCl

3.) MgF_2

2.) MgO

4.) CaCl_2

16.) Draw the Lewis structure for the following molecules.

1.) PH_3

3.) SO_2

2.) NH_4^+

4.) C_2H_2