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# Chemical Bonding

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## SECTION 1

**SHORT ANSWER** Answer the following questions in the space provided.

1. \_\_\_\_\_ A chemical bond between atoms results from the attraction between the valence electrons and \_\_\_\_\_ of different atoms.  
(a) nuclei (c) isotopes  
(b) inner electrons (d) Lewis structures
2. \_\_\_\_\_ A covalent bond consists of  
(a) a shared electron. (c) two different ions.  
(b) a shared electron pair. (d) an octet of electrons.
3. \_\_\_\_\_ If two covalently bonded atoms are identical, the bond is identified as  
(a) nonpolar covalent. (c) ionic.  
(b) polar covalent. (d) dipolar.
4. \_\_\_\_\_ A covalent bond in which there is an unequal attraction for the shared electrons is  
(a) nonpolar. (c) ionic.  
(b) polar. (d) dipolar.
5. \_\_\_\_\_ Atoms with a strong attraction for electrons they share with another atom exhibit  
(a) zero electronegativity. (c) high electronegativity.  
(b) low electronegativity. (d) Lewis electronegativity.
6. \_\_\_\_\_ Bonds that possess between 5% and 50% ionic character are considered to be  
(a) ionic. (c) polar covalent.  
(b) pure covalent. (d) nonpolar covalent.
7. \_\_\_\_\_ The greater the electronegativity difference between two atoms bonded together, the greater the bond's percentage of  
(a) ionic character. (c) metallic character.  
(b) nonpolar character. (d) electron sharing.
8. The electrons involved in the formation of a chemical bond are called  
\_\_\_\_\_.
9. A chemical bond that results from the electrostatic attraction between positive and negative ions is called a(n) \_\_\_\_\_.