

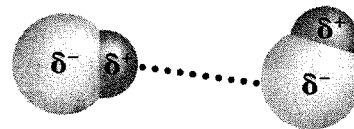
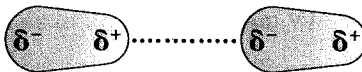
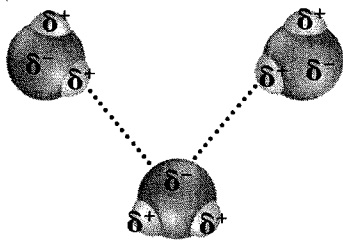
## Section 13.2 Forces of Attraction

*In your textbook, read about forces of attraction.*

Answer the following questions.

1. Ionic, metallic, and covalent bonds are examples of what type of forces? \_\_\_\_\_
2. Dispersion forces, dipole–dipole forces, and hydrogen bonds are examples of what type of forces? \_\_\_\_\_
3. Describe dispersion forces.  
\_\_\_\_\_  
\_\_\_\_\_
4. Dispersion forces are greatest between what type of molecules?  
\_\_\_\_\_
5. Describe a permanent dipole.  
\_\_\_\_\_  
\_\_\_\_\_
6. Describe dipole–dipole forces.  
\_\_\_\_\_  
\_\_\_\_\_
7. Describe a hydrogen bond.  
\_\_\_\_\_  
\_\_\_\_\_

8. Identify each of the diagrams below as illustrating dipole–dipole forces, dispersion forces, or hydrogen bonds.



a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

9. Rank dipole–dipole forces, dispersion forces, and hydrogen bonds in order of increasing strength.

\_\_\_\_\_