

Complete the following assignment in your class notebook with the heading:
Intermolecular Forces

1. Number the following bonds/forces in increasing order, from weakest (1) to strongest (4).

_____ Dipole-dipole forces

_____ Covalent bonds

_____ Hydrogen bond

_____ Dispersion forces

2. For each pair of substances listed below:

- i. Draw two Lewis structures for each and a dotted line to represent the intermolecular force of attraction between them. (See the examples worked out in class!)
- ii. Label the intermolecular force.
- iii. Circle the one that would have the higher boiling point.

a. $\text{CH}_3\text{CH}_2\text{OH}$

CH_3CHO (oxygen has a double bond)

b. CH_2O

CH_3OH

c. Ar

Kr

d. CH_4

CH_3Cl

e. He

O_2

f. NH_3

C_2H_4