More Intermolecular Forces

For questions 1-5, identify the main type of intermolecular force in each compound: London dispersion force, dipole-dipole, hydrogen bond

1) carbon disulfide

2) ammonia

3) oxygen

4) CH_2F_2

5) C_2H_6

Rank the following compounds by increasing melting point – remember, as IMFs increase, the melting point increases

6) C_2H_6, C_2H_5OH, C_2H_5I

7) H_2S, H_2O, H_2

8) BBr_3, BI_3, BCl_3

More Intermolecular Forces - Key

For questions 1-5, identify the main type of intermolecular force in each compound:

1) carbon disulfide
London dispersion force

2) ammonia
Hydrogen bonding

3) oxygen
London dispersion force

4) CH_2F_2
Dipole-dipole forces

5) C_2H_6
London dispersion force

Rank the following compounds by increasing melting point:

6) **C_2H_6, C_2H_5I, C_2H_5OH**
LDF, DP-DP, HB

7) **H_2, H_2S, H_2O**
LDF, DP-DP, HB

8) **BCl_3, BBr_3, BI_3**
All nonpolar, only LDF, London forces increase as the size increases
(we count the number of electrons as a simplistic way of finding the size)