

IMF (Magnets)

Factors That affect IMF Strength

- ① Polarity: More Polar \rightarrow Stronger IMF
- ② Distance between Molecules \rightarrow \uparrow dist. \downarrow IMF
- ③ Size: (larger Molecules: \uparrow IMF (Gravity))

Earth

Re

Dec 16-7:30 AM

Types / Flavors of IMF

Strong

① Ion - Ion

\oplus Na^+ \ominus Cl^-

② Ion - Dipole (Polar Molecule)

Na^+ H_2O δ^-

$\text{Na}^+ \text{Cl}^- \text{Na}^+ \text{Cl}^-$
 $\text{Cl}^- \text{Na}^+ \text{Cl}^- \text{Na}^+$
 $\text{Na}^+ \text{Cl}^- \text{Na}^+ \text{Cl}^-$

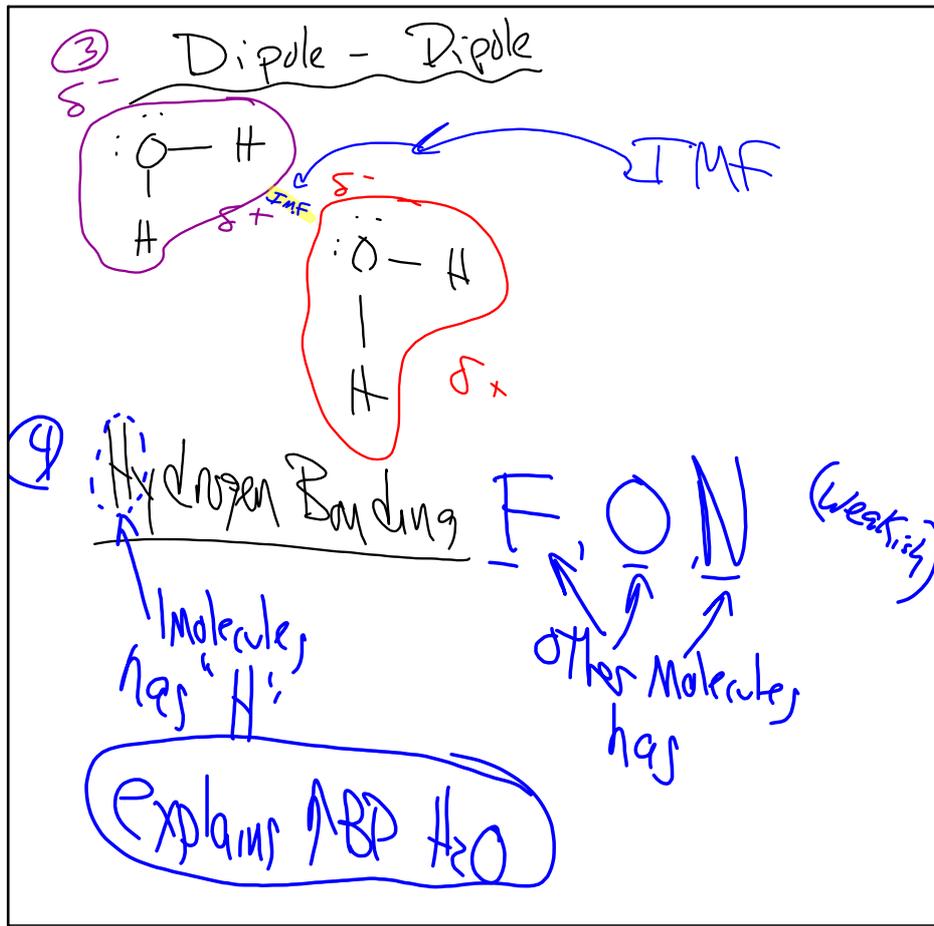
Crystal lattice

Solvation Process

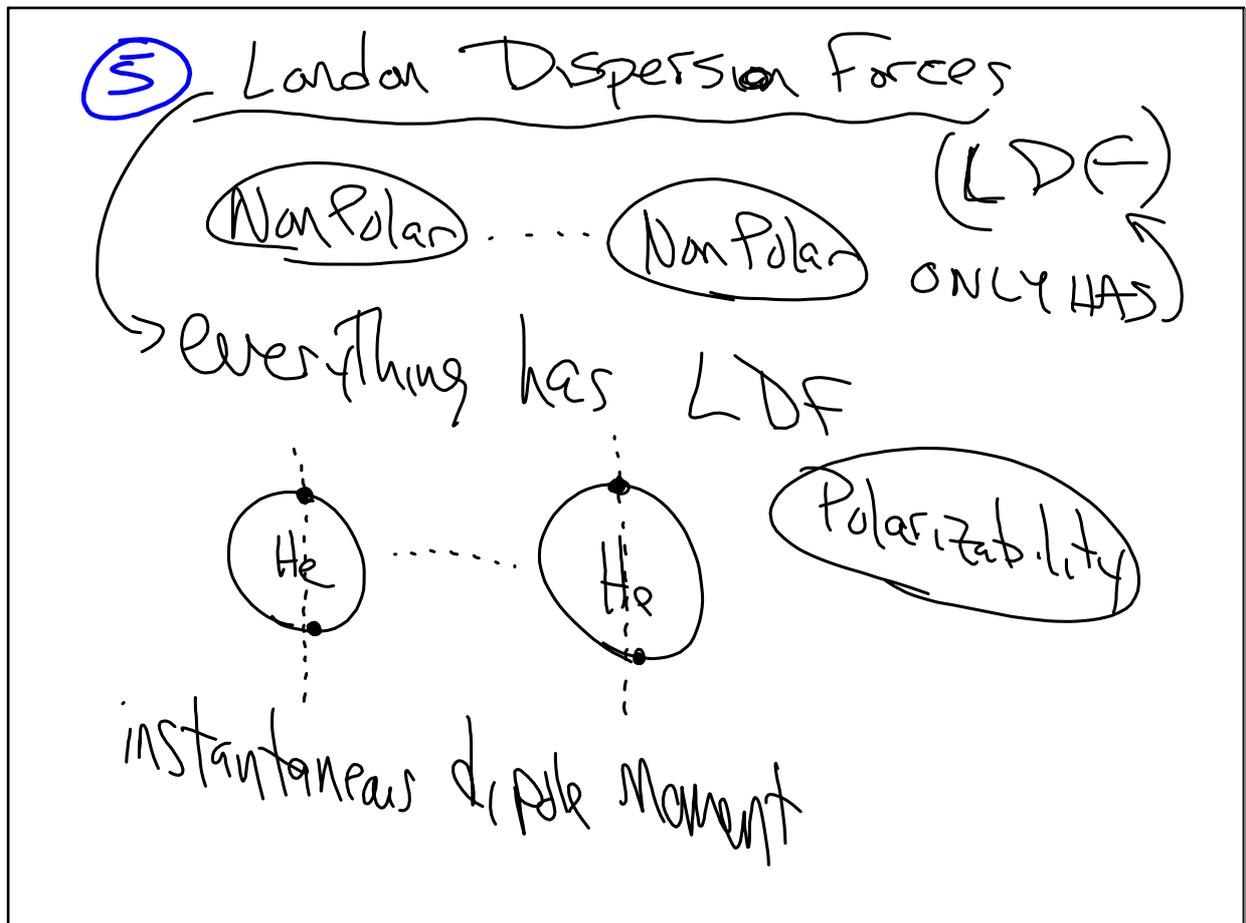
H_2O structure: O with two lone pairs, H below, H to the right.
 δ^- on O , δ^+ on H .

Weak

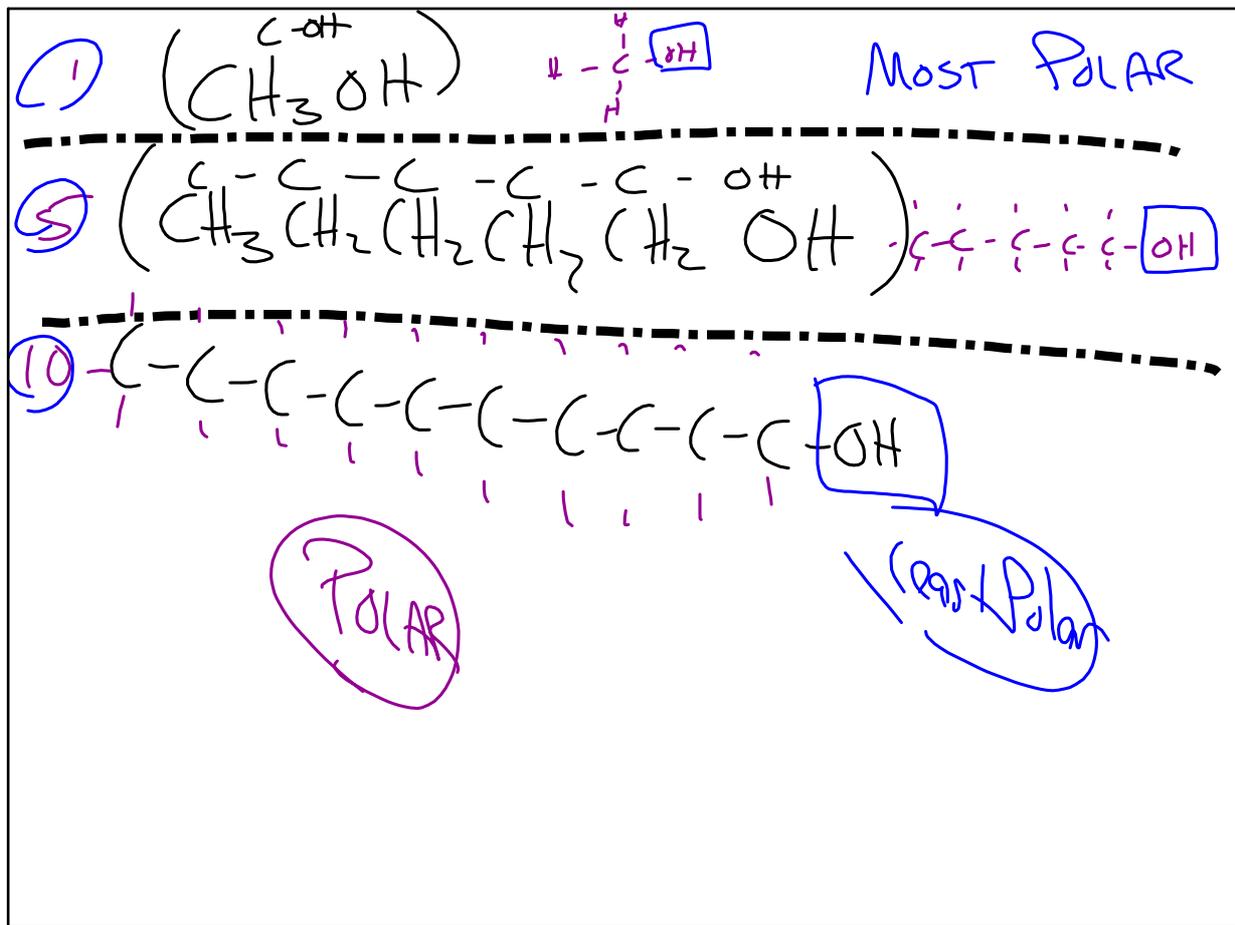
Dec 16-8:10 AM



Dec 16-8:17 AM



Dec 16-8:36 AM



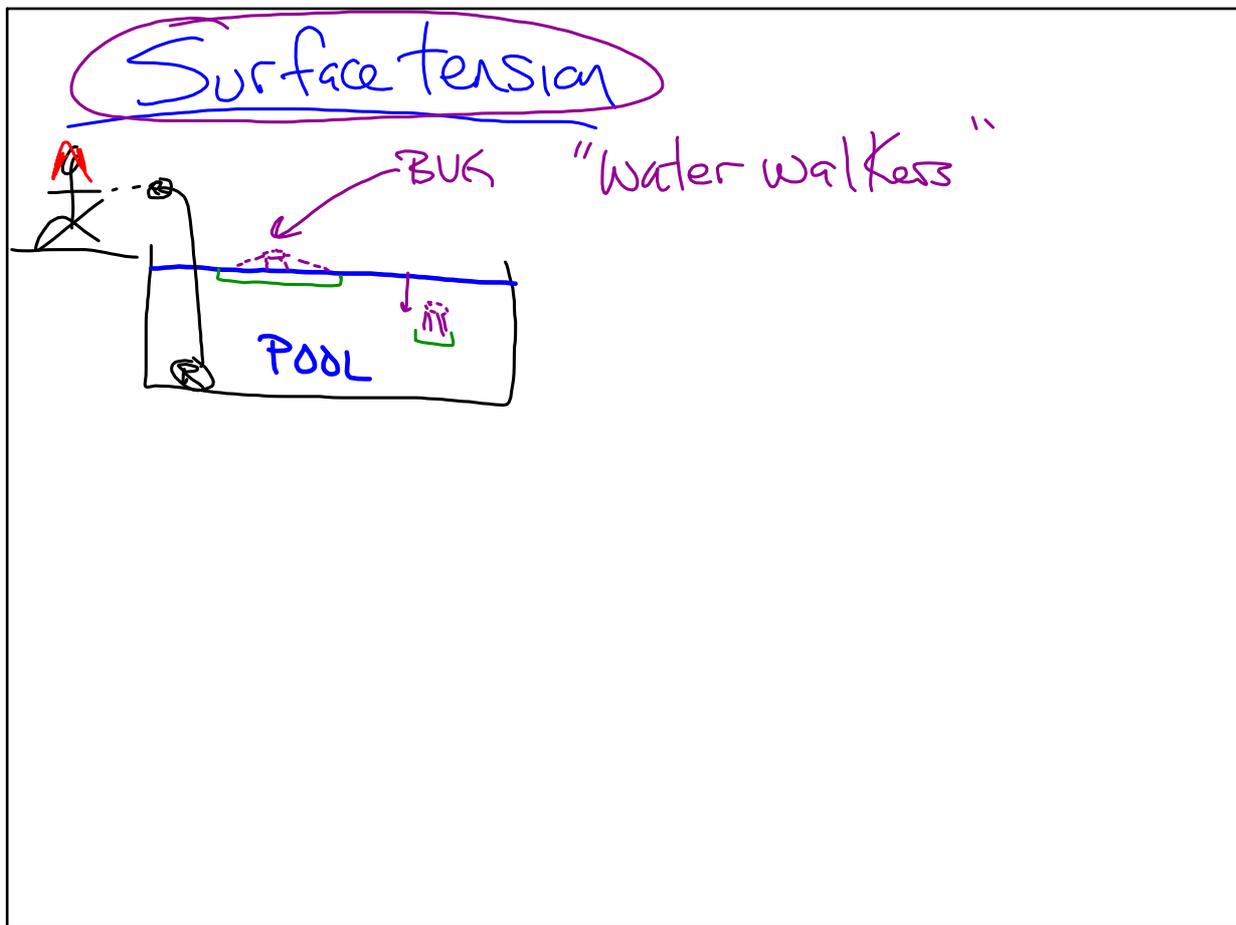
Dec 16-8:55 AM

Viscosity - resistance to flow

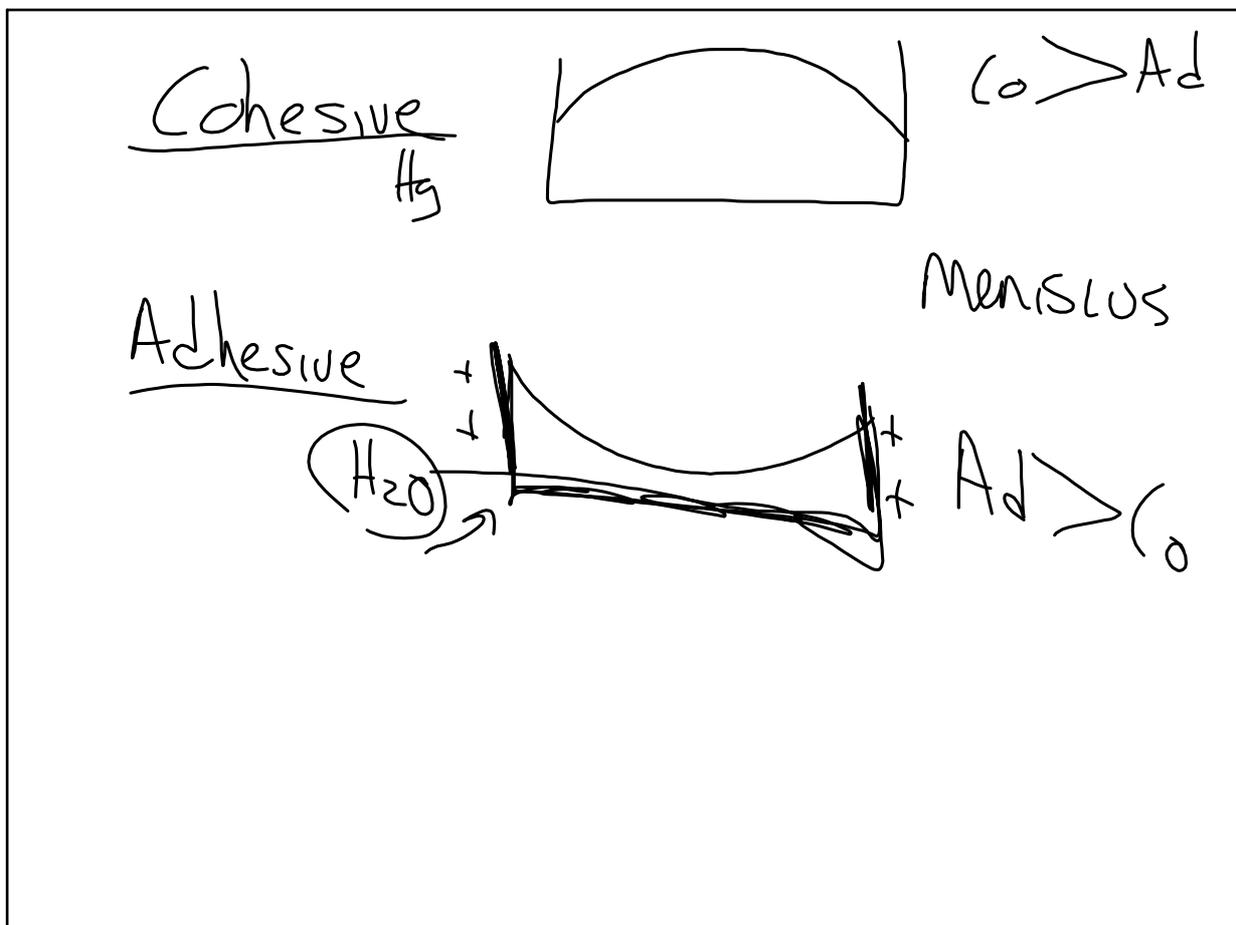
Water vs Maple syrup.

Slower flow
 b/c \uparrow IMF

Dec 16-9:02 AM



Dec 16-9:07 AM



Dec 16-9:14 AM

11/20, 26, 30

Dec 16-9:17 AM