Source: KB20200824220730

1 | Properties of water

Cohesion

- Individual molecules held up well +
- Strong surface tension

Adhesion

- Water attracts other molecules, and it stick to water pretty well
    - If we make water molecules touch another molecules, it will stick to it and start moving
    - Think: a straw — a thin straw could draw up water without additional pressure just by water working its way up using adhesion
- This is how we make “xylum” and “Pholem” happen
    - Water’s adhesive force — and adhesive force only — is how water travels upwards from a tree
    - Given that some trees are, em, pretty tall, this means that the capillaries that the water travel in must be very small
    - A Pico-Gauge could be used to measure the pressures within the phorlem

Water…

- is wet => Strong tetrahedral H-Bonds
- is sticky => Has both Cohesive and Adhesive Properties
- have a **high specific heat capacity.**
    - Strong bonds
    - Resistant to change

Water’s Universal Solvent Properties

Water has high solubility

- Many things could dissolve in water
- Makes chemical processes quite easily
- Quite versatile — could dissolve stuff easily

Hydrophillic + Hydrophobic Effects of Water

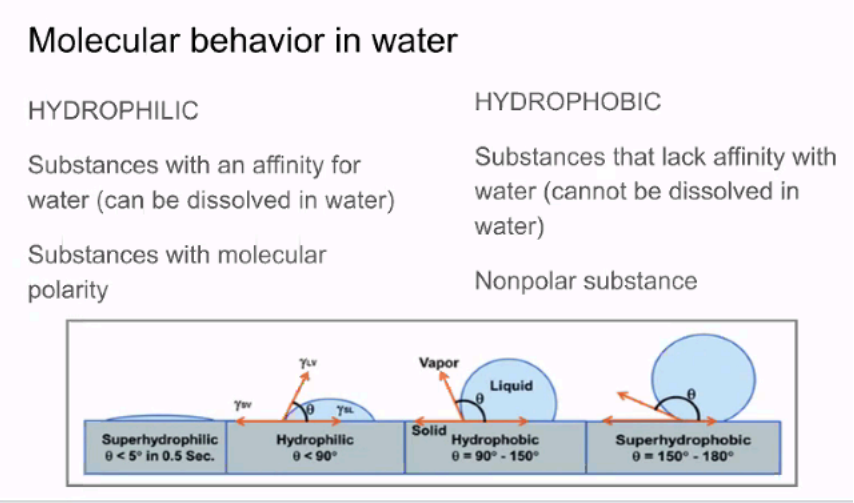

Figure 1: Screen Shot 2020-08-26 at 3.07.53 PM.png

- In hydrophillic senarios, water will to “puddle out” (“Wetting”) — adheses to the surface
- In hydrophobic senarios, water leverage its cohesion properties to create spheres