1 | Alright, let's talk about water.

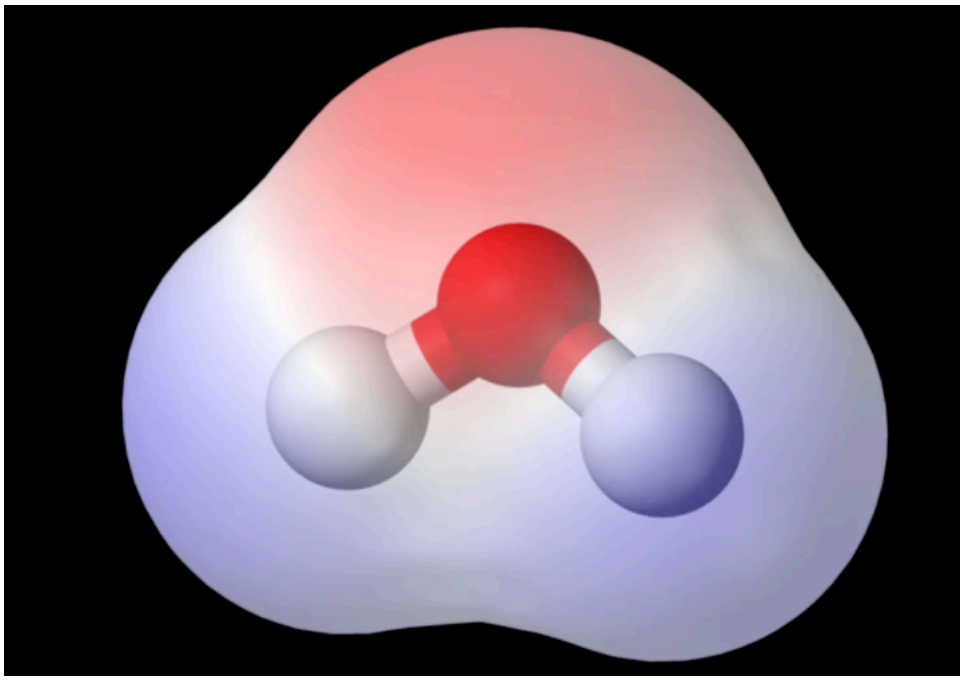

Figure 1: Watah!

Intra-Molecular water bonds

- As we know (or looked up from the PTable)
- Hydrogen has electronegativity of 2.20, and oxygen has EN 3.44
- The difference >0.4 <1.7 makes these bonds **polar covalent**

Inter-Molecular water bonds properties

The hydrogens form "hydrogen tetrohedron" structure, making the following properties:

- "Sticky"
  - Cohesion — individual molecules held up well
  - Strong surface tension
  - Adhesion — other molecules stick to water pretty well
  - Water is WET!!!
    - Strong tetrahedral H-Bonds
- These bonds make water have a **high specific heat capacity.**
  - Strong bonds
  - Resistant to change

Universal Solvent Properties

Water has high solubility

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

2 | **So, why is water the chosen liquid?**

- Liquid at Earth temperatures
- Sticky => strong bonds that help water hold together + resist change in temperature (hence why AlcaholLand cannot exist)
- Is universal solvent