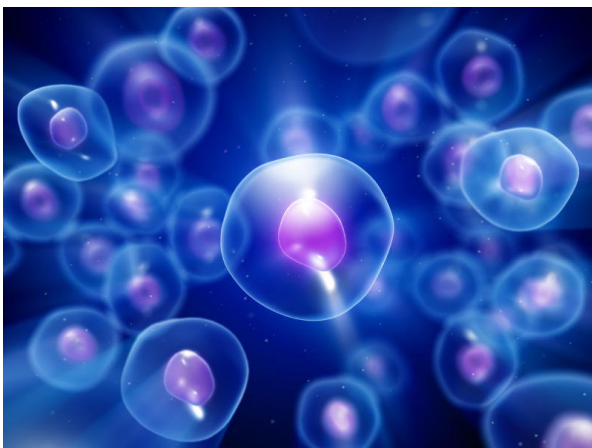


## 2.2: Properties of Water

- The first cells evolved in water!
- All living things are about 70% water





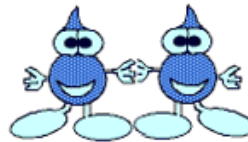
Water has special properties caused by hydrogen bonding.

-> Cohesion

water sticks  
to itself

-> Adhesion

water sticks  
to other stuff



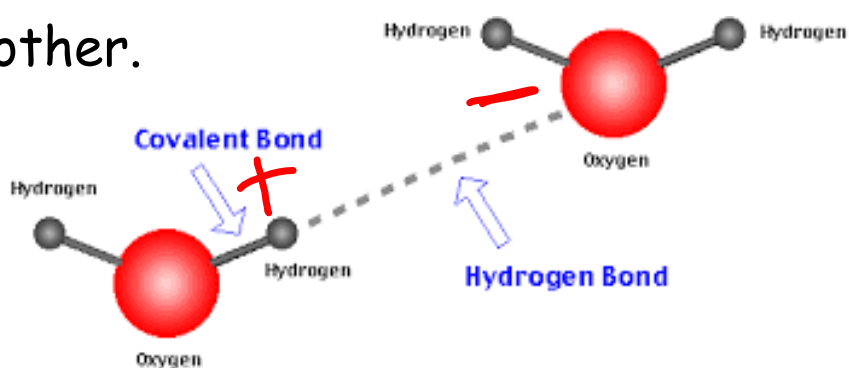
Cohesion



Adhesion

## Hydrogen Bonding

The hydrogen in  $\text{H}_2\text{O}$  has a slightly positive charge and likes to stick to other stuff that's slightly negative like the oxygen in  $\text{H}_2\text{O}$ . This creates a weak attraction like when two weak magnets are held near each other.





## Cohesion - Water sticks to itself

-> This gives water a high surface tension, meaning that really light stuff like bugs can walk on water when they spread out their weight.





**Adhesion** - Water sticks to **other stuff**

-> This allows plants to take up water from the roots in a process called **capillary action**.

