

# Chemistry of Life

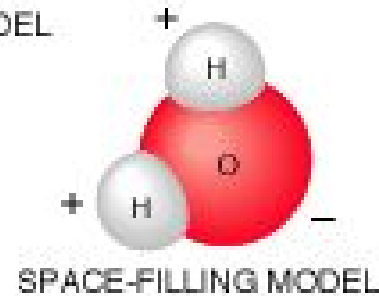
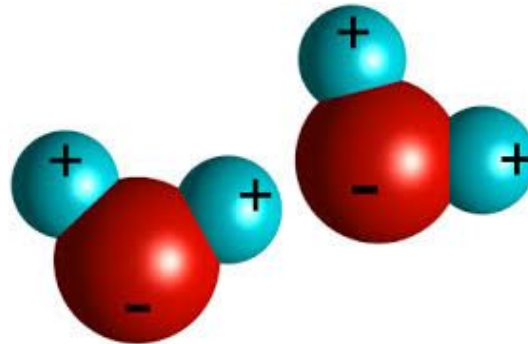
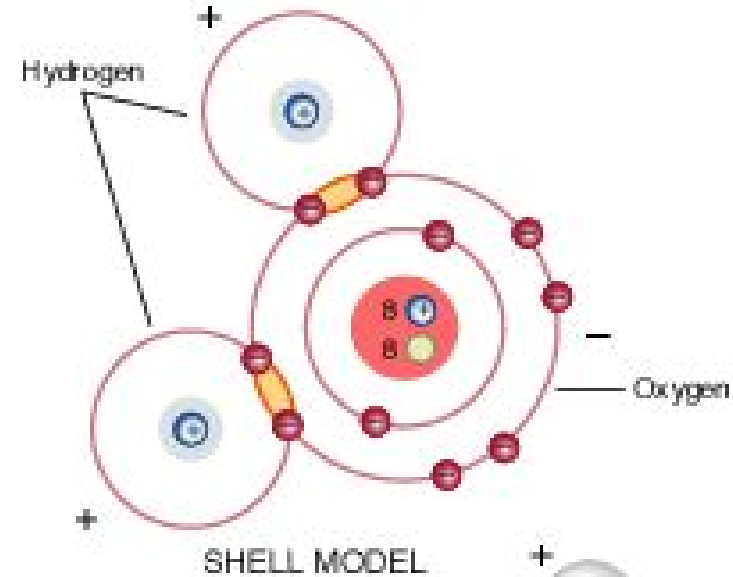


## Chapter 2

## 2.2 Properties of Water

**Water:** a molecule composed of one oxygen atom and 2 hydrogen atoms

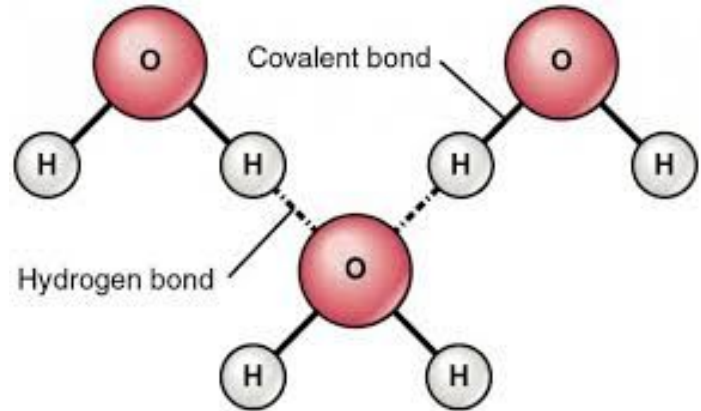
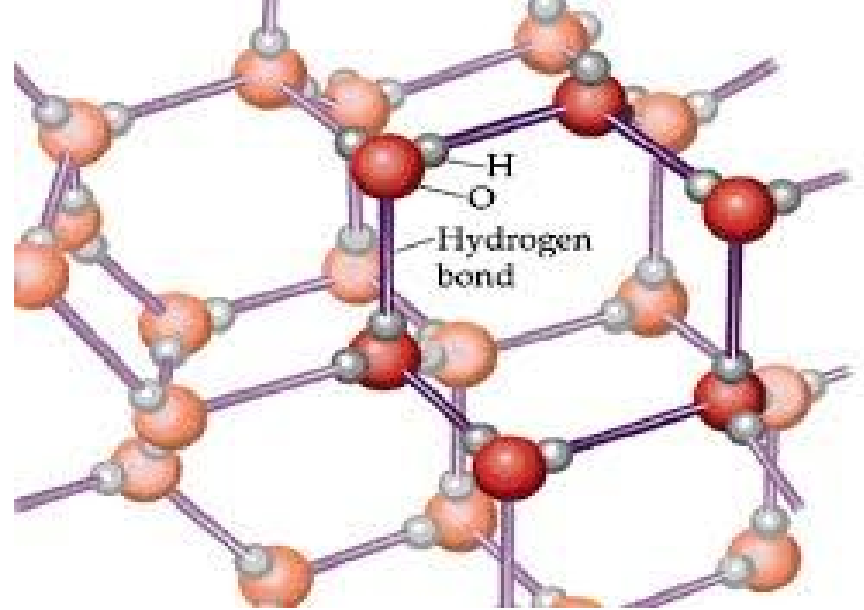
- neutrally charged
- containing 10 protons and 10 electrons
- **polar molecule:** when charges are unevenly distributed



## Hydrogen bond:

A weak bond created between the negatively charged O atom and a positively charged H atom

- not as strong as covalent or ionic bonds



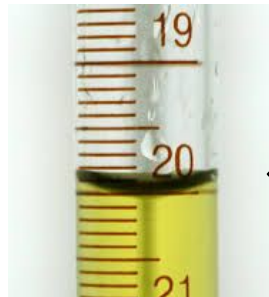
**Cohesion**: an attraction between molecules of the same substance.



**Surface tension**: the surface film of a liquid caused by the attraction of the molecules to each other



**Adhesion**: an attraction between molecules of different substances



**Meniscus**: curvature of a liquid close to the surface of a container

# Solutions and Suspensions

**Mixture**: a material composed of two or more elements that are physically mixed together, but *not* chemically combined



**Solution**: when a material is dissolved into a substance all the components are evenly distributed throughout the mixture.



**Solute**: the material that is dissolved

**Solvent**: the substance in which the solute dissolves.

## **Suspension**

particles do *not* dissolve, only separate into small pieces which do not settle out.

