Structure of water.

A **water molecule** consists of two hydrogen atoms bonded to an oxygen atom.
Because of the higher **electronegativity** of the oxygen atom, the bonds are polar covalent (**polar bonds**). The oxygen atom attracts the shared electrons of the covalent bonds to a significantly greater extent than the hydrogen atoms. As a result, the oxygen atom requires a partial negative charge ($\delta-$), while the hydrogen atoms each acquire a partial positive charge
($\delta+$).
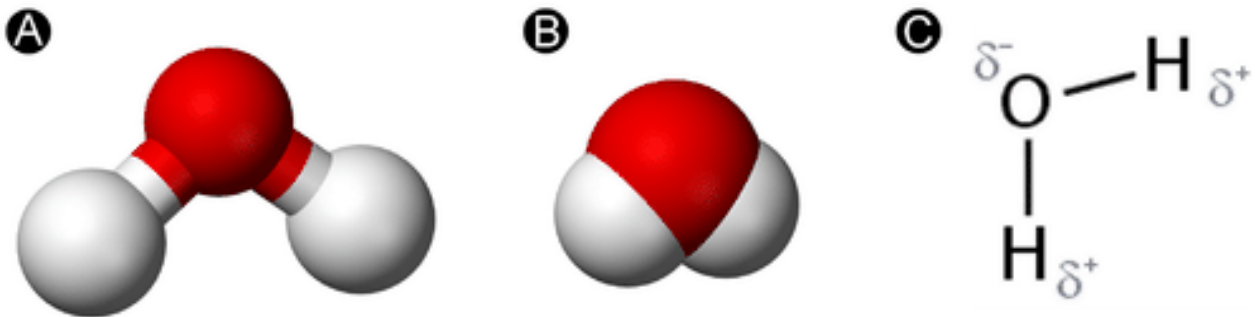
The **polarity of water** is responsible for dissolving other **polar** molecules, **such as** sugars and ionic compounds **such as** salt. This polarity occurs because of a difference in electronegativity of the two atoms.

https://www.youtube.com/watch?v=A88ih2PQDNs

To calculate the velocity.

Velocity or speed is a measure of how quickly an object moves. The velocity is the change in the position of an object, divided by the time. The unit for velocity is meters per second (m/s).

$$velocity = \frac{((final\ position) - (initial\ position))}{time} = \frac{(change\ in\ the\ position)}{time}$$

$$v = \frac{x_f - x_i}{t} = \frac{\Delta x}{t}$$