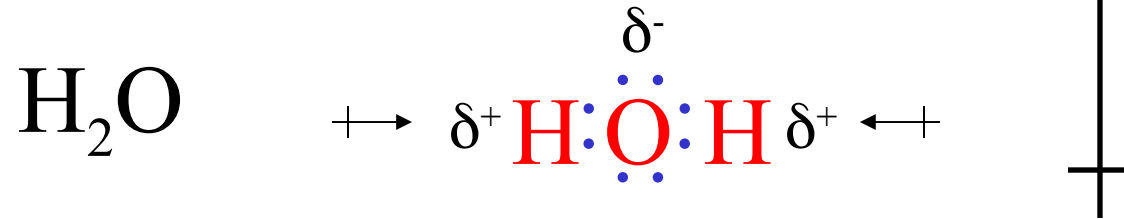


# VSEPR

## Molecular geometries



4 pairs of valence e<sup>-</sup> on O tetrahedron

bonds angles 109.5° actually 108°

polar bonds dipole moment H-bonding

H bound to O, N, F = H-bond donor

$\overset{\cdot\cdot}{\underset{\cdot\cdot}{\text{O}}}$ ,  $\overset{\cdot\cdot}{\underset{\cdot\cdot}{\text{N}}}$ ,  $\overset{\cdot\cdot}{\underset{\cdot\cdot}{\text{F}}}$  = H-bond acceptor