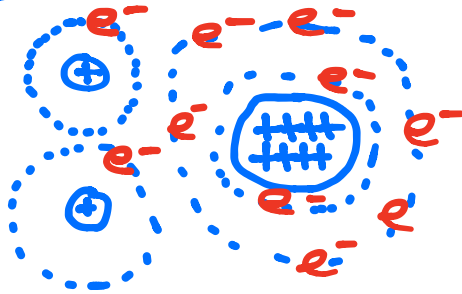
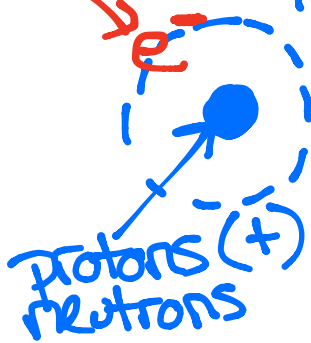


# I. Water

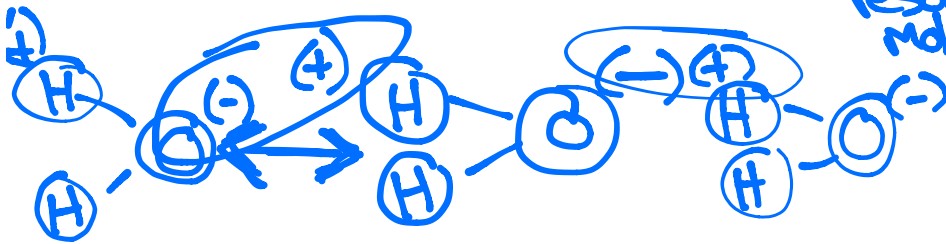
@ Chemical Formula

electrons  $H_2O$



## POLAR!!

→ unequal sharing of electrons resulting in charged molecules



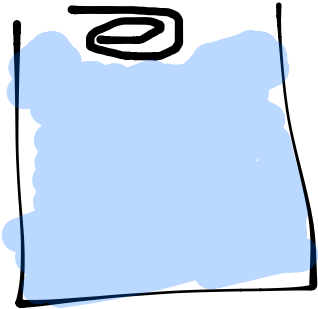
## (b) Cohesion + Adhesion



particles of the same substance stick together

particles of different substances stick together

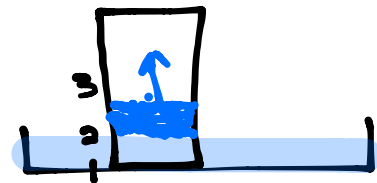
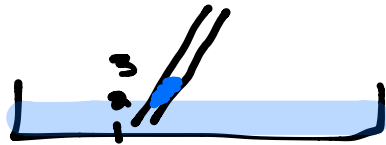
# © Surface Tension



↳ the tendency of a liquid to act like a solid at the "surface"

↳ the molecules resist separation

# © Capillary Action



© Viscosity  
↳ "thickness" of a liquid  
resist separation  
of the molecules

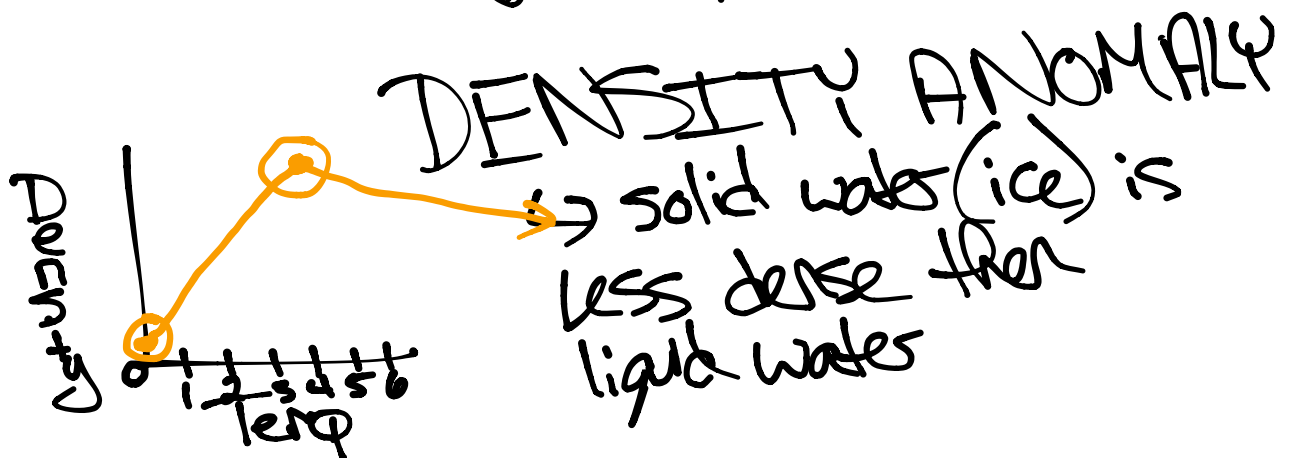
$$D = \frac{M}{V}$$

## ⑦ Density

Liquid water

↑ temp, ↓ density

↓ temp, ↑ density



## ⑧ Salinity

↳ all the dissolved solid particles in the water

↳ measured ppt (‰)

↳ ocean 35 ppt

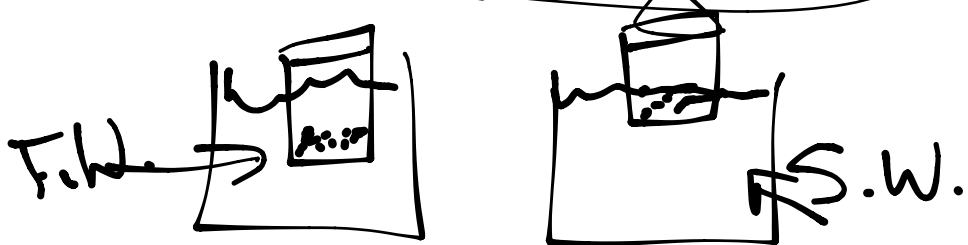
↳ measure using  
density (g/ml)

\* Thermohaline Layering  
How water separates  
based on both temp +  
salinity

h) Buoyancy

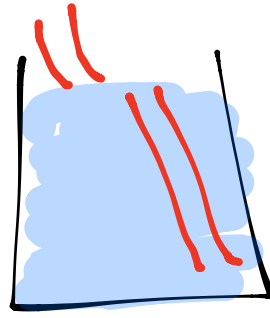
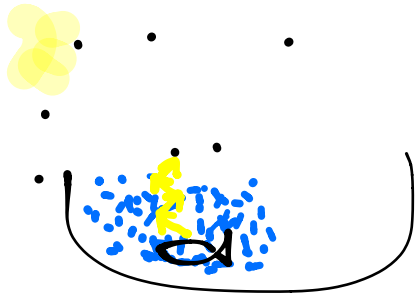
↳ ability to float in  
a liquid

↳ differences in  
density



i) Refraction

- Apparent bending of light



# j) Water Pressure

↳ constant rate of pressure of

Surface 1 atm

Depth (m)	Pressure (atm)
10 m	2 atm
20 m	3 atm
30 m	4 atm

↳ Heat capacity  
↳ the ability to  
absorb energy (heat)  
w/out a change in temp.

Water  $\rightarrow$   $\uparrow$  heat capacity  
↳ allows for Earth's  
moderate climate