

Chemical Formula: "Recipe" for how to build ingredients



big 2 tells you how many molecules there are

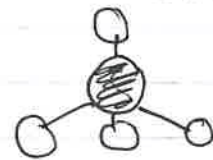
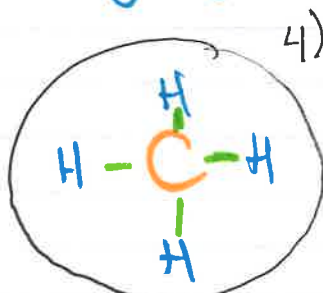
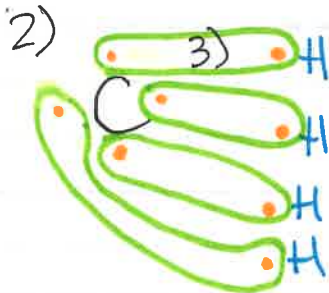
little 2, # of atoms of the letter to the left

Structure formula "instructions"

tells how a molecule is put together

Drawing Molecules H_2O CO_2 O_2 CH_4

Ex: CH_4 1 Carbon 4 hydrogens



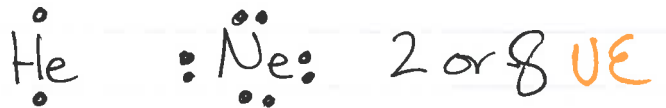
Practice: H_2O , CO_2 , NH_3 , N_2

- 1) figure out # of each atom
- 2) Draw all dot models
- 3) Draw circles around 2 unpaired electrons to show bonds
- 4) Re draw with lines between atoms to show bonds

Bonding & Molecules

Neutral
 Same # protons and electron
 Same amount positive (+) & negative (-) charge.
NO CHARGE

Stable
 Full outer shell/ring of valence electrons



Ionic Bond Atoms steal valence electrons
 other Atoms give away valence electron

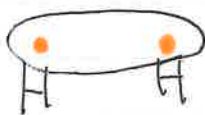


~~neutral~~
 Stable

positive & negative attract

Covalent Bonds: atoms share valence electron to become both neutral & stable, & form Molecules.

ex:



→



molecule: 2 or more atoms bonded w/ covalent bonds

Bond: pair of electrons shared between 2 atoms

neutral stable

