

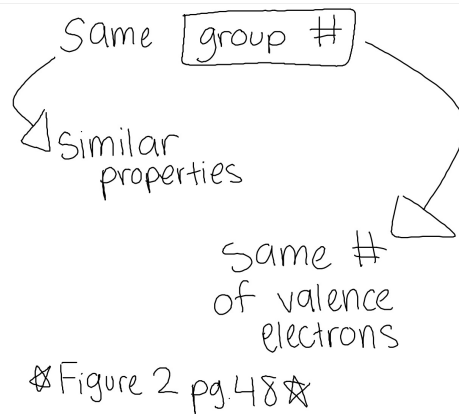
Ch. 2 L1 "Atoms, Bonding & the Periodic Table"

"What Determines an Element's Chemistry?"

↳ the # of valence electrons determines the chemical properties.

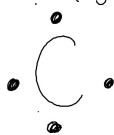
Each element has a specific # of valence electrons. (1-8)

***valence electrons- highest energy level**



★ electron dot diagram

ex) Carbon (group 14)



4 valence electrons

EDD-includes the symbol for an element surrounded by dots.

*each dot = 1 valence electron

ex) Oxygen (group 16)
- 6 valence electrons

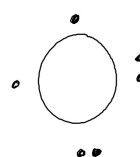


Fig 1. pg. 47

★ Apply It! Pg. 49

★ If atoms are "full" w/ 8 valence electrons, they are more stable (unlikely to gain, lose, or share electrons)

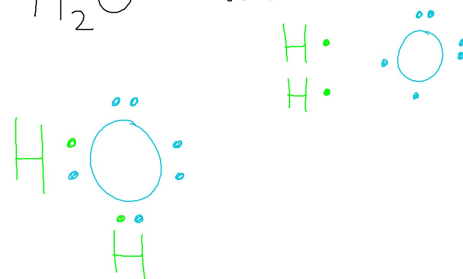
Valence electrons can be transferred

or

shared ...

this creates a chemical bond

ex) H₂O - water



periods
groups

