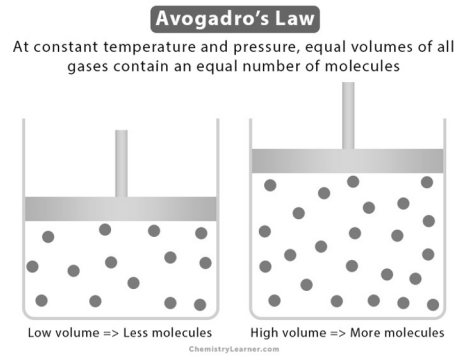
Avogadro's Law

A gas at constant temperature (*particle speed*), pressure (*number of collisions*), and volume (*size*) will always have the same number of particles.

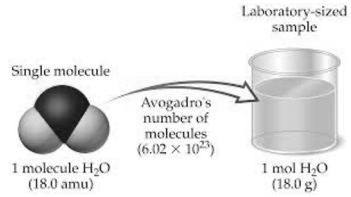
Avogadro's Law was the first time different gases would have the same number of particles at the same conditions leading to **mol**

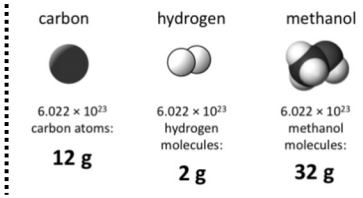


6

The mol and Avogadro's Constant

One **mol** of a particle is equal to the number of particles that make the atomic mass of the particle when written in grams (*g*).





Avogadro's Constant (N_A) 1 mol of any particle contain exactly 6.022×10^{23} particles of the matter

7