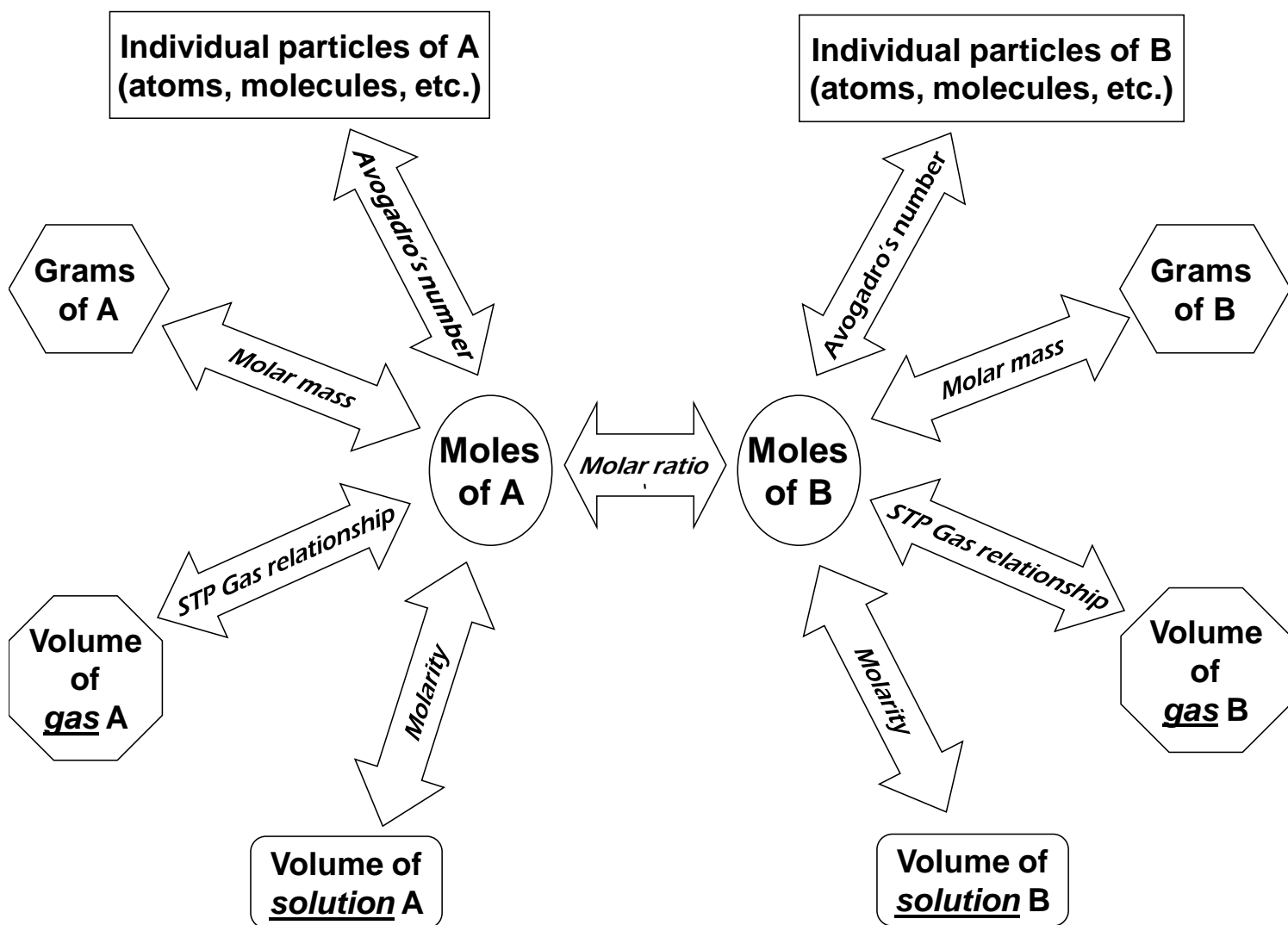


The Mole Wheel



Avogadro's number: 1 mole = 6.02×10^{23} particles

- Particles can be atoms, molecules, ions, etc.

Molar mass: the number of grams of a substance required to equal 1 mole of that substance

- Use atomic masses from the periodic table to calculate molar mass.

STP Gas relationship: at STP, 1 mole of gas = 22.4 L gas.

- STP (Standard Temperature and Pressure) = 0°C and 1 atm pressure

Molarity: measure of concentration of a solution

- Moles of solute / volume (in liters) of solution

Molar ratio: numerical relationship between any 2 substances in a reaction

- Use coefficients from balanced equation.