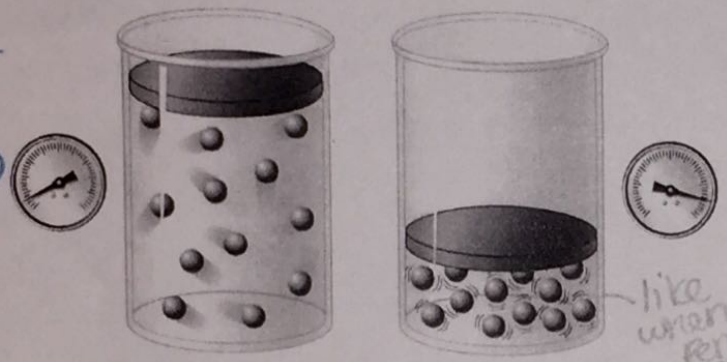
What variables affect a gas?

- how much space a gas takes up
- essentially, the volume of its container
- units: mL, liters, cm^3

show w/ glass coffee press.



(a) Low pressure, fewer collisions

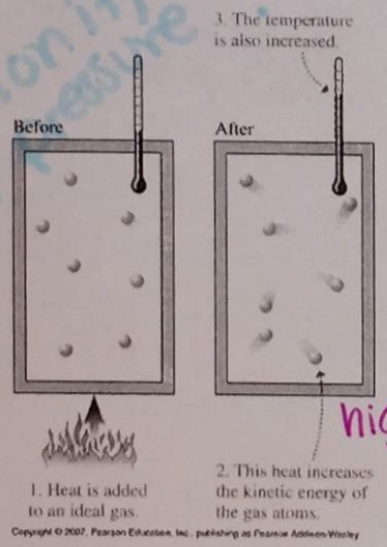
(b) High pressure, more collisions.

like when ferry station is really crowded; lots of collisions of PPl

- related to the # of collisions the gas particles make w/ the wall of its container
- units: atm, kPa, mmHg

1 atm = 101.3 kPa (Table A)

If I increase how much I push on it, I ↑ pressure



low temp

high temp, more KE, more motion

- the absolute (Kelvin) temp. of an ideal gas is directly proportional to the avg KE of the particles

⊛ units must be in Kelvin!

↳ K = °C + 273 (Table T)