

SPRINKLESTUDIES

= gases = LAW'S

Pressure

- ◊ pressure - force applied over an area
- ◊ gases - space between molecules
 - variables
 - ◊ number of particles (moles)
 - ◊ volume (shape)
 - ◊ pressure
 - ◊ temperature

Boyle's Law

- ◊ Relates pressure and volume
- ◊ $P_1 V_1 = P_2 V_2$
 - temp and moles must be constant

Charles's Law

- ◊ $\frac{V_1}{T_1} = \frac{V_2}{T_2}$
 - pressure and moles must be constant

Gay Lussac's Law

- ◊ $\frac{P_1}{T_1} = \frac{P_2}{T_2}$
 - volume and moles must be constant

Combined Gas Law

- ◊ $\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$
 - moles must be constant
 - temp is in K

ex. 2L bottle at STP. what is pressure