Name: _____ Date: 4/10/18

Aim: I can explain the behavior of gases.

Do Now:

_____

_____

Notes:

Boyle's Law
Volume ↓ pressure ↑

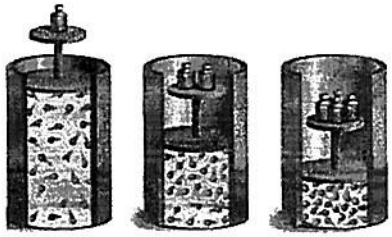
Laws and Principles

Boyle's Law- If you decrease the volume of a container of gas, the pressure of the gas will increase, provided the temperature does not change. (no temperature change)

Example: Squeezing a balloon

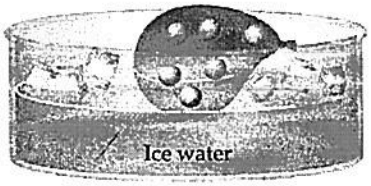
Charles Law
temperature ↑ volume ↑
temperature ↓ volume ↓

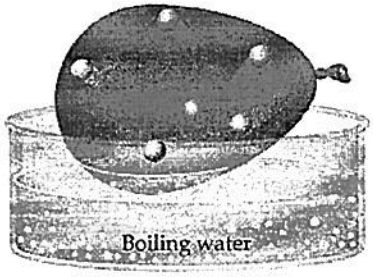
Boyle's Law



Charles Law-For a gas at a constant pressure, if you increase the temperature, then the Volume will increase.

Example: Hot air balloon, Car tires





Charles Law is similar to what other concept which we have discussed this chapter?

It is similar to THERMAL EXPANSION

_____

_____

Pascal's Principle- States that pressure exerted on a fluid is transmitted equally throughout the fluid.

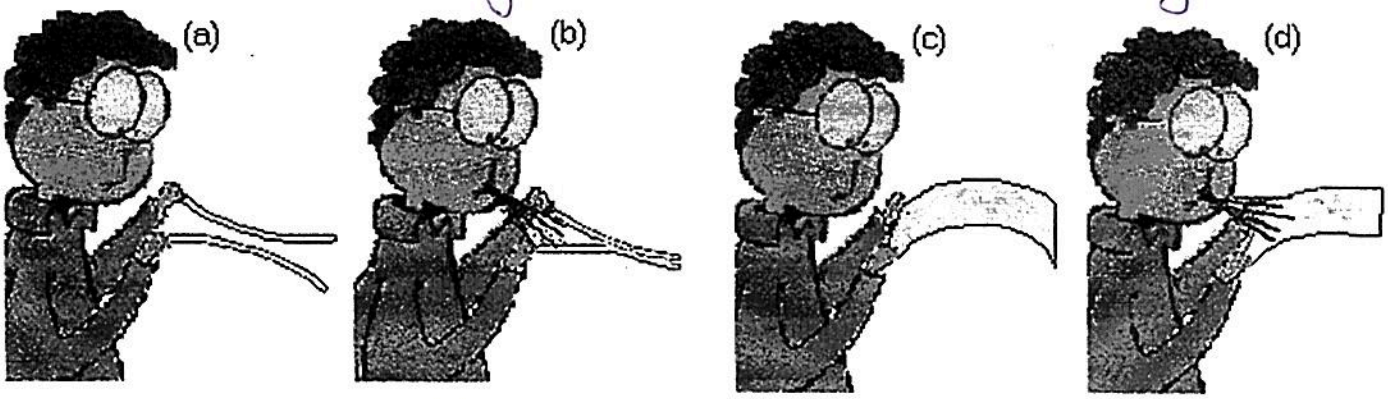
Example : Squeezing a toothpaste tube, The Blob

Pressure transfers throughout fluid

*(Anything that flows) gas or liquid

Bernoulli's Principle- As the velocity of a fluid increases, the pressure exerted by the fluid decreases.

Example: airplane wing Frisbee, fan, treading water



Venturi Effect- If a moving force is forced to travel in a narrower path, the velocity of that fluid will increase.

Example: hose nozzle, Sand blasting, power washer