

Chap 10 - Gases!

No definite volume → Add P or decrease volume Very compressible

22.4 L of gas = 1 mole ???

AT STP

1 atm      0°C  
 101.3 kPa      273 K  
 760 mmHg  
 760 torr

No definite shape

Fills the entire container!

Molecules: -- very far apart.

Weak / negligible IMF ("non-existent")

Always homogeneous.

Dec 5-8:11 AM

Water vapor ⇒ Water "gas"

Dec 5-8:21 AM

Gases - Affected by

P, V, T

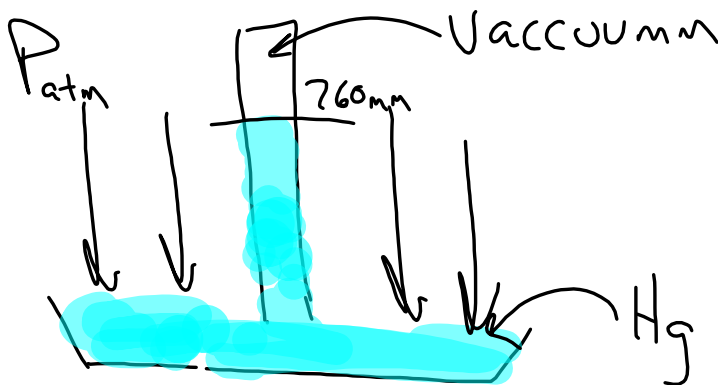
$$\frac{PV}{T} = \text{constant}$$

$$\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$$

Air Pressure - Barometer

Dec 5-8:26 AM

Torrucelli - Barometer.

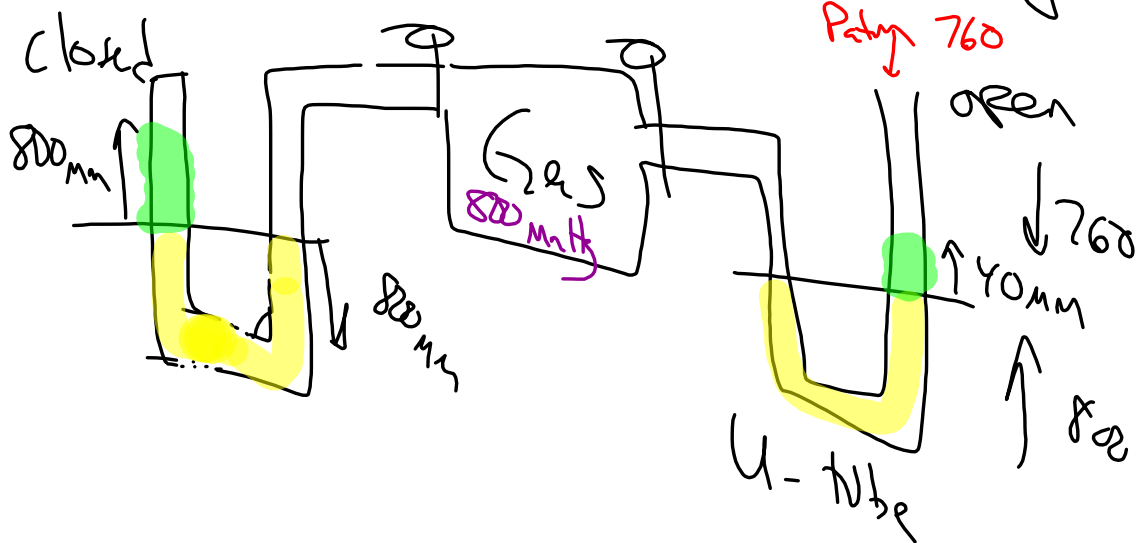


Dec 5-8:28 AM

$$P = \frac{F}{A} \quad \frac{\text{Newtons}}{\text{m}^2}$$

Dec 5-8:40 AM

Manometer - Measures pressure of a confined gas.



Dec 5-8:42 AM

$$10 / 20 + 23$$

Dec 5-8:47 AM