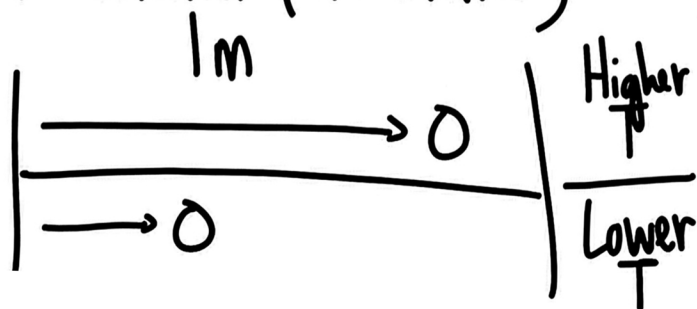


Noteset 7A (Part 4) - In Class Noteset

Properties of Gas - Temperature

Temperature (T)

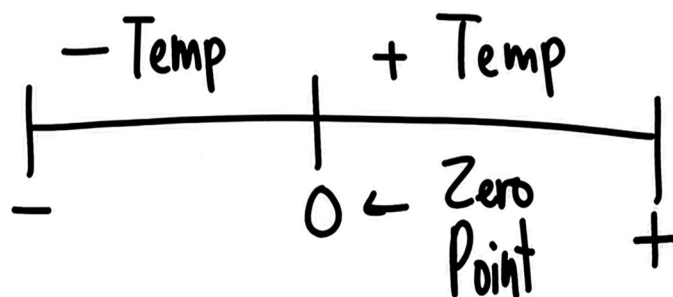
The speed (rate, velocity) that a particle travels in matter (all states)



Relative and Absolute Temp

Relative Temperature

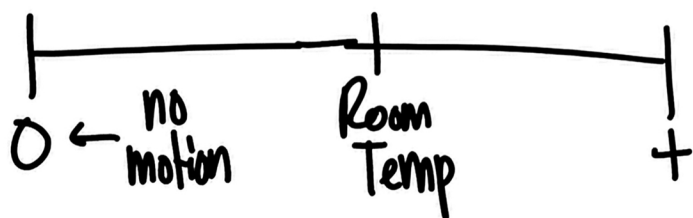
Rate (speed) scale with a certain speed being given the zero (0) value.



Relative and Absolute Temp

Absolute Temperature

Rate (speed) scale with no motion being 0 and scale increasing as speed inc.



Units of Temperature

Relative Temp

$^{\circ}\text{C}$ (Celcius) [metric]

$^{\circ}\text{F}$ (fahrenheit) [imperial]

Absolute Temp

k (kelvin)

0k = Absolute Zero
(No motion)

Converting kelvin and Celcius

$$K = ^\circ C + 273.15$$

$$^\circ C = 31.6^\circ C \quad K = ?$$

$$K = 31.6 + 273.15$$

$$K = 304.75 K$$

$$^\circ C = K - 273.15$$

$$K = 212.6 \quad ^\circ C = ?$$

$$^\circ C = 212.6 - 273.15$$

$$^\circ C = -60.55^\circ C$$

$$\text{Abs. Zero } 0 K = -273.15^\circ C$$