
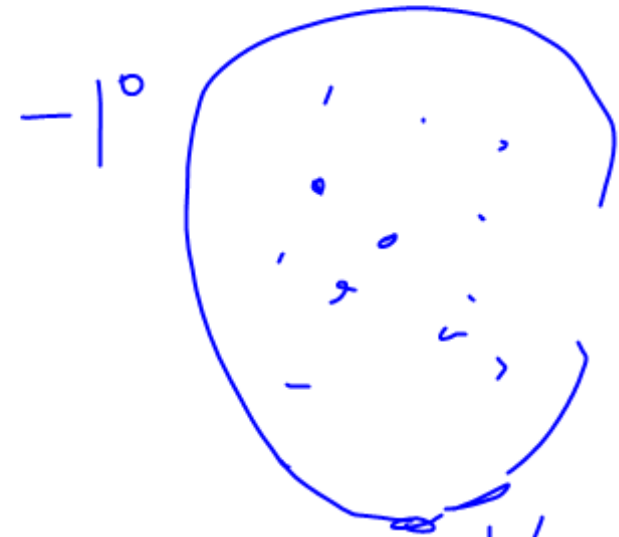
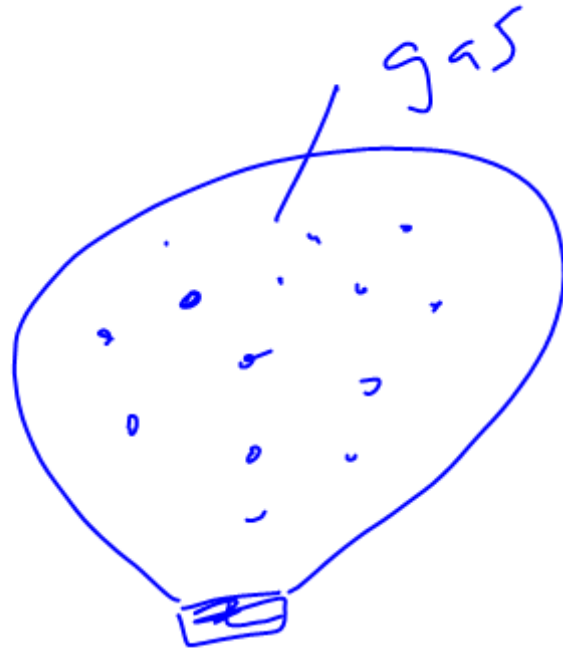


Temperature - Avg. kinetic energy

- Fahrenheit - Freeze = 32°
boiling = 212°
- Celsius - Freeze = 0°
Boiling = 100°
- Kelvin - 0 is Absolute! 
Freeze = 273
boiling = 373

Kelvin:

0°



smaller $\frac{1}{273^{\text{rd}}}$

-273

$\frac{273^{\circ}}{273}$



No

Motion!

Absolute!

- Thermal Energy - Kinetic energy of All the molecules
- Heat - thermal energy moving from warmer object to a cooler one.
- Temperature - avg. kinetic energy

$$\Delta E = \overset{\text{Mass}}{\text{--- kg}} \times \overset{\text{S.H.}}{\text{---}} \left(\frac{\text{J}}{\text{kg} \cdot \text{K}} \right) \times \overset{\Delta \text{Temp}}{\text{--- K}}$$


Specific Heat = amt. of energy ↑ temp. of
 1 kg 1°K.

1. a. Avg. kinetic energy ²⁰
 b. mol. heat ↑ movement
 c. use lines, based on ΔT

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- 2 a. therm. energy from hot → cold
 b. overall Avg. therm. temp., heat - hot-cold
 c. 

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3. a. difference in specific heat, d: (L. Chem.

b. $(.032 \text{ kg}) (235) (40 \text{ K}) = 320.8 \text{ J}$.

4. $(F-32) \times 5 / 9 = (-27)(5) = -135 / 9 =$

5. $(860-32) = 828 \times 5 = 4140 / 9 = 460^\circ\text{C}$ (-150 C)