

Work = Energy
- or Transfer of energy
= $F \times D$ (Joules)

Power = rate of transfer of
Energy $\frac{\text{Energy}}{\text{time}} = \text{Watts}$

P. 445
Potential Energy - stored energy

Gravitational Potential Energy -
potential energy related to height
weight \times height

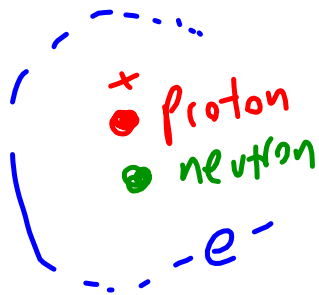
Elastic Potential Energy -
stretched & compressed

p. 449

Mechanical Energy - position & motion

Thermal Energy - kinetic energy of ptcls.

Electric Energy - movement of electrons



e- electron

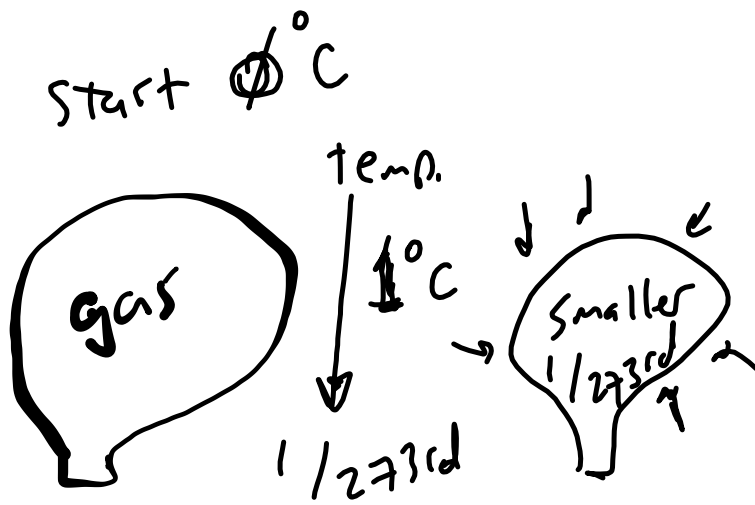
Chemical Energy - Energy stored in chemical bonds

Nuclear Energy - Energy stored in nuclei of atoms

Electromagnetic - EM Waves
EM p.575

Temperature - Avg. kinetic en. of the ptcls

	<u>Freeze</u>	<u>Boil</u>
Fahrenheit	32°	212°
Celsius	0°	100°
Kelvin	273°	373°



$\downarrow 1^{\circ}\text{C}$

$273 \times$

then \rightarrow

$$\frac{273}{273} = \downarrow$$

Absolute
zero!
 ϕ energy

Thermal Energy - total kinetic motion

Heat - thermal en. transferred from warm to cold

* You can only lose heat,
You cannot gain cold!

