

NOTES: Forms of Energy

All energy falls into two categories:

- Potential Energy: stored energy and energy of position.
- Kinetic Energy: motion of waves, electrons, atoms, molecules and substances.

What forms of energy are there?

POTENTIAL	KINETIC
A. <u>Chemical</u> Energy	D. <u>Radiant</u> Energy
B. <u>Nuclear</u> Energy	E. <u>Electrical</u> Energy
C. <u>Gravitational</u> Energy	F. <u>Mechanical</u>
D. <u>Elastic</u> Energy	G. <u>Sound</u>
	H. <u>Thermal</u> Energy

How will we ever remember these?! Just remember the sentence:

Cam Newton got everyone really excited making stinky tacos.

Cam = Chemical
Newton = Nuclear
Got = Gravitational
Everyone = Elastic

> PE

Really = Radiant
Excited = Electrical
Making = Mechanical
Stinky = Sound
Tacos = Thermal

> KE

Sentence	Energy	Definition	Example
1. Cam	Chemical PE	Energy stored in the <u>bonds of atoms and molecules</u>	matches, batteries, gasoline, food
2. Newton	Nuclear PE	Energy stored in the <u>nucleus of an atom</u> . The energy that holds the <u>nucleus together</u>	breaking down Uranium (Nuclear Power Plants)
3. Got	Gravitational PE	Energy of <u>place</u> or <u>position</u> . <u>Higher</u> = more <u>gravitational energy</u>	ball at top of mountain
4. Everyone	Elastic PE	Energy stored in <u>an object's tension</u> . Distorts an item's <u>volume</u> or <u>shape</u> .	stretched rubberband, bowstrings, compressed spring
5. Really	Radiant KE	<u>Electromagnetic</u> energy that travels in <u>waves like light</u>	visible light (sun, light bulbs, etc.)
6. Excited	Electrical KE	Movement of <u>electrons</u> .	Lamp, computer, hair dryer
7. Making	Mechanical KE	The <u>movement</u> of a substance from <u>one place to another</u> . Motion	riding a bike, running
8. Stinky	Sound KE	Movement of <u>energy</u> through substances <u>in waves</u> .	bell drum
9. Tacos	Thermal KE	The <u>vibration</u> or movement of <u>atoms and molecules</u> . <u>HEAT</u>	stove boiling water, curling iron