

# Forms of Energy

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1. All energy falls into two categories:

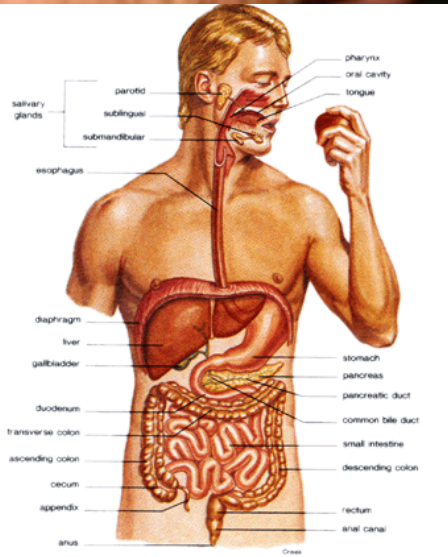
- Potential: stored energy and energy of position
- Kinetic: motion of waves, electrons, atoms, molecules and substances.

# 2. What Forms of Energy Are There?

<b>POTENTIAL</b>	<b>KINETIC</b>
<p><u>Chemical</u> Energy</p> <p><u>Nuclear</u> Energy</p> <p><u>Gravitational</u> Energy</p>	<p><u>Radiant</u> Energy</p> <p><u>Electrical</u> Energy</p> <p><u>Mechanical</u> Energy</p> <p><u>Sound</u> Energy</p> <p><u>Thermal</u> Energy</p>

# 1. Chemical

- Energy stored in the bonds of atoms and molecules.

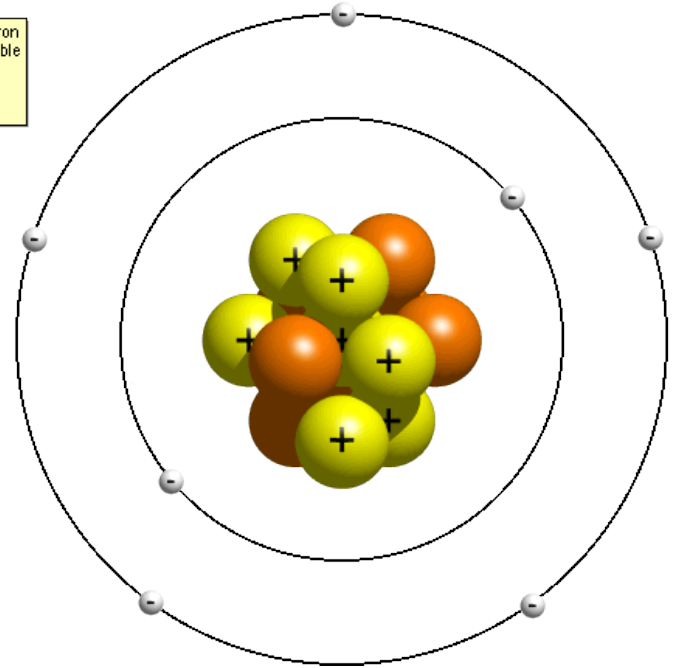


Example: Matches,  
Digestion, batteries

# 2. Nuclear

- Energy stored in the nucleus of an atom. The energy that holds the nucleus together.

Nitrogen's Electron  
Configuration Table  
 $1s^2$   
 $2s^2 2p^3$



**Example: Breaking down Uranium, fusion (sun and stars), fission**

# 3. Gravitational



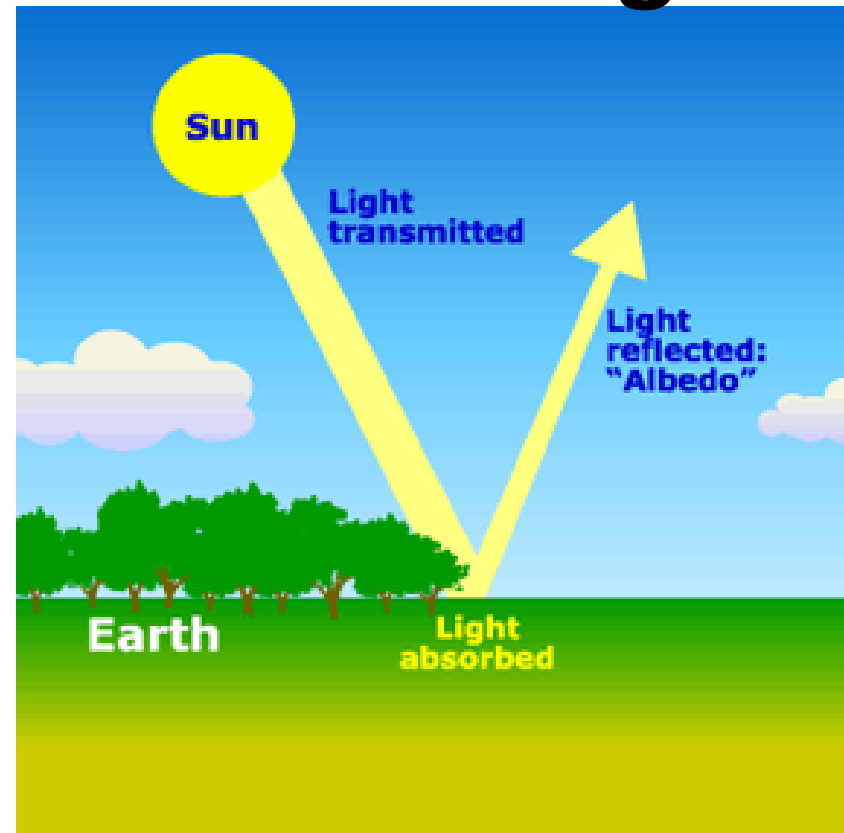
- Energy of place or position.  
Higher=more gravitational energy.

**Example: things that can fall or swing.**

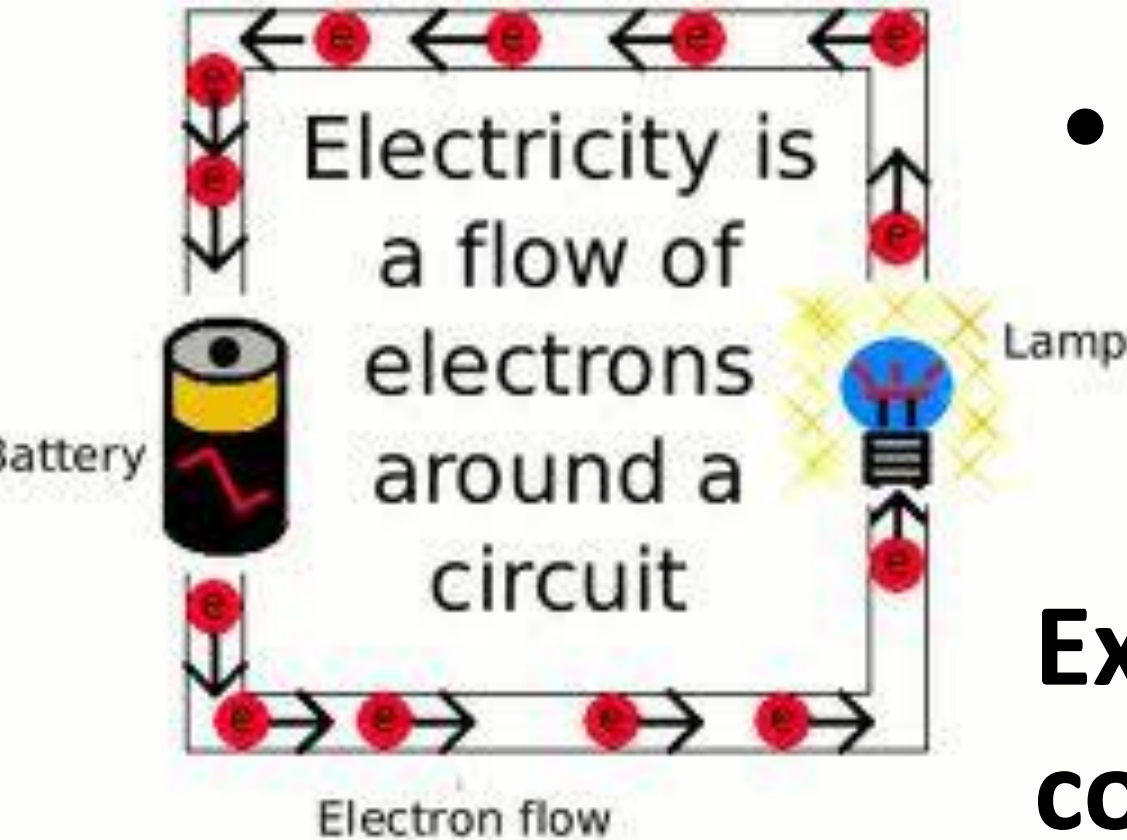
# 4. Radiant

- Electromagnetic energy that travels in waves like light.

**Example:  
Visible Light**



# 5. Electrical



- Movement of electrons.

**Example: lamp, computer, anything that plugs in.**



# 6. Mechanical



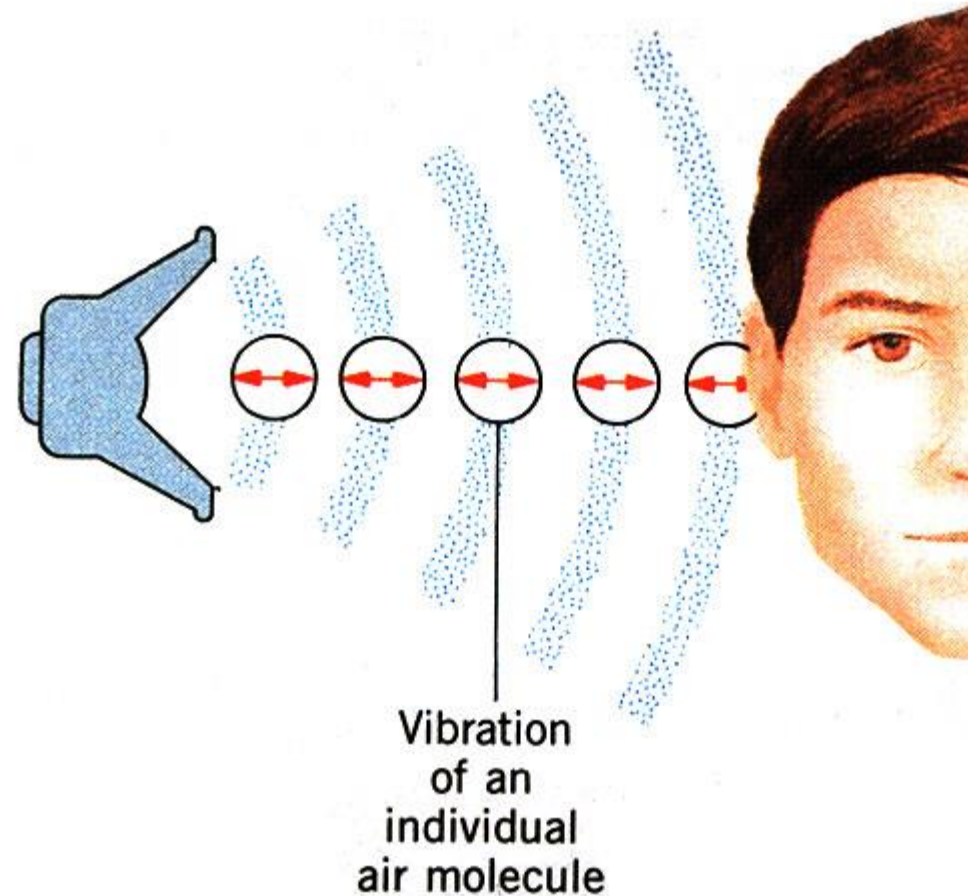
**Example: Riding a bike**

- The movement of a substance from one place to another. Energy of Motion.

# 7. Sound

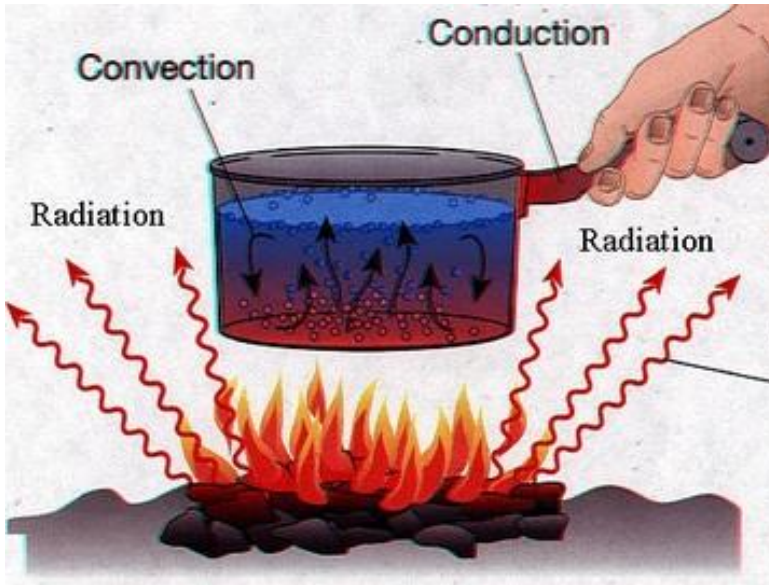
- Movement of energy through substances in vibrations.

**Example: bell**



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# 8. Thermal



**Example: stove  
boiling water**

- internal energy of an object due to the kinetic energy of its atoms and/or molecules.
- HEAT.

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