**Chapter 3**

**Energy and Energy Transformations Notes**

Energy – makes things change or move

Types of Energy

Light – makes things glow

Sound – makes noise

Electrical – makes electrical currents flow

Chemical – makes chemicals interact

Mechanical – makes things move

Heat – make things hot

Potential and Kinetic Energy

Potential Energy – stored energy (can be any type )

Kinetic Energy – energy of motion (can be any type )

\*potential energy and kinetic energy turn into one another

Ball at top of ramp has PE

Ball while rolling down ramp has KE

Law of Conservation of Energy – energy cannot be created or destroyed it can only change form.

Eg. Electrical 🡪heat = Toaster

Mechanical 🡪 Sound = drum

Evidence of the Law of Conservation of Energy – pendulum. When let go a pendulum will not swing all the way back because some of the energy changes to other forms of energy.

(See video at https://www.youtube.com/watch?v=s409AG5dZ28)