**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)