**Energy Notes – Pt. II**

II. **Mechanical Energy** – the total amount of potential energy

and kinetic energy in a system.

# Mechanical energy = PE + KE

III. **Energy Changes**

 A. **Law of Conservation of Energy** – In all energy changes,

energy cannot be created or destroyed.

#   -Sometimes energy appears to be lost because it

 is converted to heat through friction.

 1. It can be **transferred** from one object to another.

 2. It can be **converted (transformed)** from one kind of

 energy to another.

#  3. Energy can be created if mass is turned into energy as in

nuclear reactions.

**Fusion** – 2 hydrogen atoms are fused into helium.

**Fission** – 1 uranium atom is broken down into 2

smaller atoms.

 B. Examples of **transformations**

 1. **Chemical to thermal to kinetic** – Car burning gasoline

 2. **Electric to heat & kinetic** – hair dryer

 3. **Light to chemical** – photosynthesis

IV. **Drawing of Electric Power Plant** – Notes