**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