Name	(First AND Last)	:	Period:

### **Energy Transformations**

- Energy <u>can change</u> from one type to another. This is called an **energy conversion** or **energy transformation** 
  - a. The *Law of Conservation of Energy* states that energy can change form, but it cannot be created or destroyed. Therefore, the total amount of energy stays the same.
  - b. In **energy transformations**, some energy is always lost to the environment as *thermal energy*.

### **Examples of energy transformations and their uses:**



- A television changes electrical energy into sound and light energy. During these transformations, it also loses energy as heat.



- A toaster changes electrical energy into thermal energy and light.



- A car changes chemical energy from fuel into thermal energy and mechanical energy.
- A car battery changes chemical energy into electrical energy and thermal energy, that electrical energy is then changed into light energy, sound energy, and thermal energy.

Name (	First AND	Last):	Period:

Directions: For the following questions, please create a flip chart and written explanation for each energy transformation.

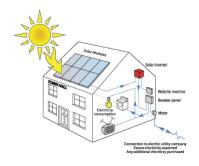
1. Flashlight:



## 2. <u>Speaking into a telephone:</u>



### 3. Solar Panel:



Name (First AND Last):	Name	(First AND	Last)	:			
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Period:\_\_\_\_\_

# 4. <u>Campfire:</u>



## 5. <u>Nuclear Power Plant:</u>

