

## **Copy and Summarize – Physical Science Topic 24**

### INSTRUCTIONS:

- Neatly print your full name, date, and class period at the top of this page, and on the back.
- On the back of this page – copy the text below. Then summarize the concepts in your own words.

## **Defining and Calculating Energy**

### *Physical Science Topic 24*

The energy of a system depends on the motion of the system, as well as the interactions that occur within the system. Energy is always changing from one kind to another, but the total energy of the system is always the same. Energy can take many forms such as motion, sound, light, and heat. The amount of energy available is mathematically calculable, and determines what the system is capable of doing.

1. Energy can be transformed (converted) within a system.
2. Energy can be transferred from one system to another (or from a system to its environment) in different ways: by conduction, mechanically, electrically, or by radiation (electromagnetic waves).
3. Regardless of what happens within a system, the total amount of energy in the system remains the same unless energy is added to or released from the system.
4. Regardless of what happens within a system, the total amount of energy in the system remains the same unless energy is added to or released from the system.
5. Motion energy (kinetic energy) is associated with the speed and the mass of an object.

Student Name \_\_\_\_\_ Class Period \_\_\_\_\_ Today's Date \_\_\_\_\_

**Copy the Text Here (Use Additional Sheet of Paper, if Necessary)**

**Summarize the Text in Your Own Words. (Use complete sentences).**