NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DATE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Energy & Power Systems**

***What*, *where*, *when*, *why*, and *how* are energy and power systems?**

**What is Energy?**

 \*\_\_\_\_\_\_\_\_\_\_\_\_ is a *\_\_\_\_\_\_\_\_\_\_\_*that is understood as the ability to perform \_\_\_\_\_\_\_\_\_.

 \*Since energy is a \_\_\_\_\_\_\_\_\_\_\_\_,it can be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 \*This quantity can be assigned to any\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_

of objects as a consequence of its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ state.

Different forms of energy include: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 \*Energy in one form can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but the \_\_\_\_\_\_\_\_\_\_\_\_ amount of energy will

 \_\_\_\_\_\_\_\_\_\_\_ in another form. This fact of energy is a called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ law.

 \*Any form of energy can be \_\_\_\_\_\_\_\_\_\_\_\_\_\_ into another form.

 \*There are often \_\_\_\_\_\_\_\_\_\_ to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to other forms of

 energy, due to the \_\_\_\_\_\_\_\_\_\_ law of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 **OVER**

**What are Power Systems?**

 \*A \_\_\_\_\_\_\_\_\_\_ system is a network of electrical \_\_\_\_\_\_\_\_\_\_\_\_\_\_ used to *\_\_\_\_\_\_\_\_\_*, *transmit*

and *\_\_\_\_\_\_\_\_\_\_\_* electric power.

\* An example of this is the Power \_\_\_\_\_\_\_\_\_ System which is also known as The \_\_\_\_\_\_\_\_\_\_.

 \*Power \_\_\_\_\_\_\_\_\_\_\_\_ such as a coal power plant \_\_\_\_\_\_\_\_\_\_\_ the power.

\*The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system of transmission substations, high voltage transmission lines, and power substations carries the power from the generating centers to the load centers.

\*The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system of power substations, transformers, power poles, and transformer drums feed the \_\_\_\_\_\_\_\_\_\_ to nearby homes, factories, and industries.

**11 DIFFERENT TYPES of POWER SOURCES:**

hydroelectric, \_\_\_\_\_\_\_\_\_\_\_\_, nuclear, \_\_\_\_\_\_\_\_\_\_\_\_, fuel cell, \_\_\_\_\_\_\_\_\_\_, geothermal/hydrothermal,

\_\_\_\_\_\_\_\_\_ power, \_\_\_\_\_\_\_\_\_\_\_fuels, \_\_\_\_\_\_\_\_\_\_

What are the top three major fuel sources for today’s in the US? What powers most French homes? Why?

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_