



Heading: \_\_\_\_\_  
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## Energy Study Guide

### Energy:

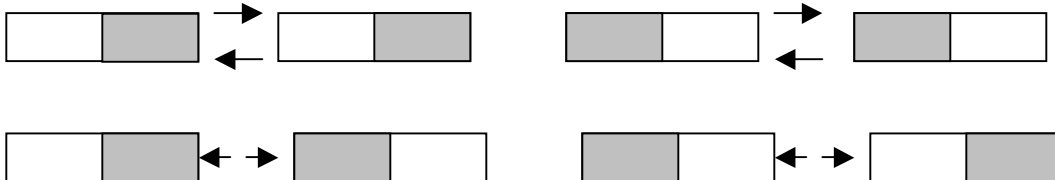
- ❖ \_\_\_\_\_ resources are able to be replenished or replaced. Examples include:
  - \_\_\_\_\_
  - \_\_\_\_\_
- ❖ \_\_\_\_\_ resources **CANNOT** be replaced such as oil, coal, and natural gas. Once they have been used they are gone. We call these things \_\_\_\_\_.
- ❖ Energy can take many forms. List an item that can transfer energy from electricity into the following forms of energy.
  - A \_\_\_\_\_ changes electrical energy to heat energy.
  - A \_\_\_\_\_ changes electrical energy to motion/kinetic energy.
- ❖ When systems are \_\_\_\_\_ there is no movement.
- ❖ In order to see you must have some \_\_\_\_\_ energy enter your eyes.
- ❖ Light travels in \_\_\_\_\_.
- ❖ As objects are raised higher there is more \_\_\_\_\_ energy between the object and the ground.
- ❖ When two objects \_\_\_\_\_ there is a transfer of energy.
- ❖ Changing the **amplitude** of a wave changes the \_\_\_\_\_ of a sound.
- ❖ The \_\_\_\_\_ is the distance between one wave's crest and the next wave's crest.
- ❖ Radios use wave \_\_\_\_\_ for different stations.

Circuits:

- ❖ In a circuit, energy flows out of the \_\_\_\_\_ terminal of the D-cell, through the wires and energy receiver, and returns to the \_\_\_\_\_ terminal.
- ❖ What could be evidence that energy is flowing through a circuit?
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- A **D-Cell**, or battery, is an **energy** \_\_\_\_\_ (it supplies electrical energy) in a circuit.
- A **wire** \_\_\_\_\_ electrical energy in a circuit.
- A **light bulb or motor** is an **energy** \_\_\_\_\_ that uses the electric power in a circuit.
- A **switch** \_\_\_\_\_.

Magnetism:

- Opposite poles \_\_\_\_\_; same poles \_\_\_\_\_.



- Magnets stick only to objects made of \_\_\_\_\_ or \_\_\_\_\_

Electromagnets:

- **Electromagnets** are a type of \_\_\_\_\_ magnet that can be turned off and on.
- The core of an electromagnet must be made of \_\_\_\_\_.