**Name:**

**Date:**

**Period:**

**Directions:** Read pages 169-173 in your textbooks with your partner. Then, answer the questions below using complete sentences.

1. Energy can change form. What energy transformation does a microwave go through when you make a bag of popcorn?
2. There can be changes between kinetic and potential energies. Explain how the kinetic and potential energy of a basketball changes as you throw it up in the air and your friend catches it. (Look at the diagram in the book!)
3. What is the Law of Conservation of Energy? Explain how riding a bike can prove the Law of Conservation of Energy to be true.
4. What is friction? How is friction involved when you ride a bike? What energy transformation takes place when you apply the brakes on the bike?
5. What type of energy transformation does a gas stove/furnace go through?
6. What type of energy transformation does a jet engine go through?
7. Describe the energy transformation that occurs when a plant undergoes photosynthesis.
8. How does our body use chemical energy? What other type of energy is given off from the chemical energy? (Besides the obvious).
9. Describe how a cell phone goes through energy transformations both when you are listening to someone talk and when you are talking on the cell phone.
10. When you use your mp3 players, iPod’s, and play video games, what type of energy transformation is occurring?
11. Some electrical devices such as hair dryers use electric energy from where?
12. A light bulb changes some electric energy into radiant energy but, it also transforms some electrical energy into what other form?
13. Thermal energy that escapes into the air and cannot be used is known as what type of energy?
14. Chemical energy from gasoline is used to make cars move. This ends up as what kind of energy in the end?