**Energy Handout**

**As you work your way through the energy interactive activity, answer the following questions to help you collect the relevant information.**

1. **What is energy?**
2. **What is potential energy? How is it stored? Provide an example.**
3. **What is kinetic energy? How is it stored? Provide an example.**
4. **What is the 1st Law of Thermodynamics? Describe the steps in which energy is transferred and transformed throughout the food chain.**
5. **What is the 2nd Law of Thermodynamics?**
6. **What is Gibbs Free Energy? What is the symbol that it is represented by?**
7. **What is the equation representing the change in the amount of Gibbs free energy (ΔG)?**
8. **What are exergonic reactions? What are endergonic reactions? What is the sign of ΔG associated with each reaction?**
9. **Is the releasing of light by a firefly endergonic or exergonic? Explain how such a process abides by the first and second laws of thermodynamics.**