

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.