

**Standard II: Students will understand that energy from sunlight is changed to chemical energy in plants, transfers between living organisms, and that changing the environment may alter the amount of energy provided to living organisms.**

**Objective 1: Compare ways that plants and animals obtain and use energy.**

- a. Recognize the importance of photosynthesis in using light energy as part of the chemical process that builds plant materials.
- b. Explain how respiration in animals is a process that converts food energy into mechanical and heat energy.
- c. Trace the path of energy from the sun to mechanical energy in an organism (e.g., sunlight - light energy to plants by photosynthesis to sugars - stored chemical energy to respiration in muscle cell - usable chemical energy to muscle contraction- mechanical energy).