



Seventh Grade Science 1st Grading Period

Power Objective:

- Describe how matter is transferred between organisms and their environments. (P.O. #1)

Academic Vocabulary:

- biomass
- interaction
- consumer
- decomposer
- invasive species
- mutualism
- parasitism
- commensalism
- predator-prey
- producer
- dependency
- energy pyramid
- food web
- niche
- biological magnification
- conservation of energy
- photosynthesis
- respiration
- symbiotic
- ecosystem
- chloroplast
- mitochondria

Energy Flow within an Ecosystem

Enduring Understandings:

- Plants use energy in light to make sugar (photosynthesis) which may be used immediately or stored for later use.
- Energy can transfer from one living thing to another.
- Respiration, the oxidizing of food, is necessary for most living things to survive.
- The total amount of energy in a system remains constant.

Essential Questions:

- How do plants make solar energy useful to an ecosystem?
- How can energy be transferred from one organism to another?
- What is respiration and why must almost every organism be able to do it?
- How much energy is actually transferred between organisms and what happened to the rest?