

Biology Notes Chapter 2-2 Flow of Energy in an Ecosystem

- I. All life on earth depends on the sun.
- II. Two types of Organisms
 - i. Autotrophs-capture light energy and convert it into usable chemical energy
 1. Also called producers
 - ii. Heterotrophs-rely on other organisms for a source of energy
 1. Also called consumers

III. Autotrophs can be split up into two categories

- i. Photoautotrophs, use light energy to produce food.
- ii. Chemoautotrophs, use other chemicals to produce food. (very rare)



IV. Heterotrophs can be split up into 4 categories

- i. Herbivore
 1. Veggie eaters, consume only other autotrophs
 2. Cattle, elephants, deer, birds, etc
- ii. Carnivore
 1. Meat eaters, consume only heterotrophs
 2. Lions, tigers, other large cats, wild dogs, sharks, seals, etc
- iii. Omnivore
 1. Consume both autotrophs and other heterotrophs
 2. Humans, domestic cats and dogs, small mammals, hippos, etc

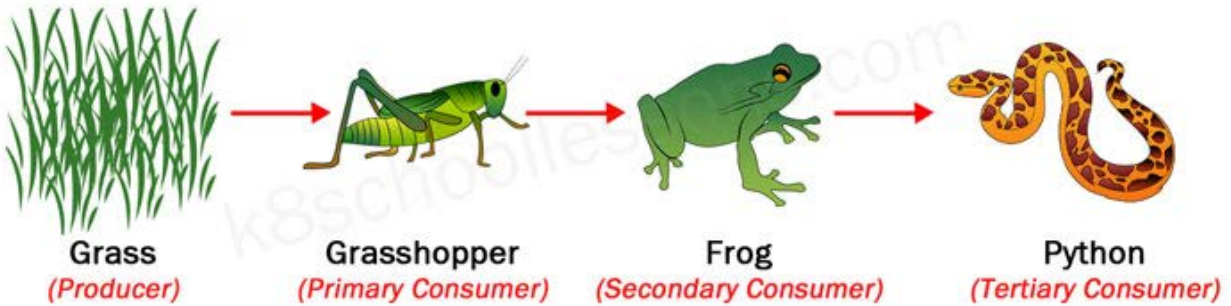


iv. Detritivores

1. Consume dead and decaying material, returning nutrients to the soil
2. Bacteria and fungi



V. Energy Flow through an Ecosystem can be traced using a food chain and/or a food web



VI. The available energy decreases with every trophic level
i. Each trophic level will have fewer organisms than the level below it.

