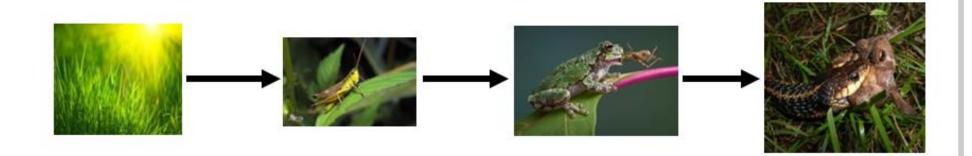
# Energy Flow Through Living Systems Picture Vocabulary

Matter and Energy



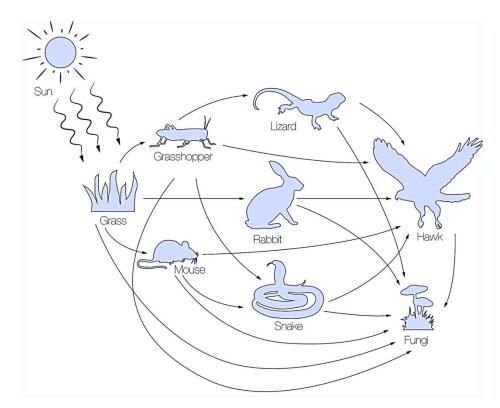
### **Food Chain**



#### A single, linear path showing the flow of energy from the sun to producer and through different levels of consumers.



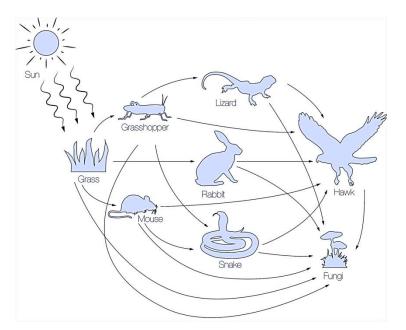
## Food Web



# Overlapping food chains with different pathways for the flow of food energy in an ecosystem.



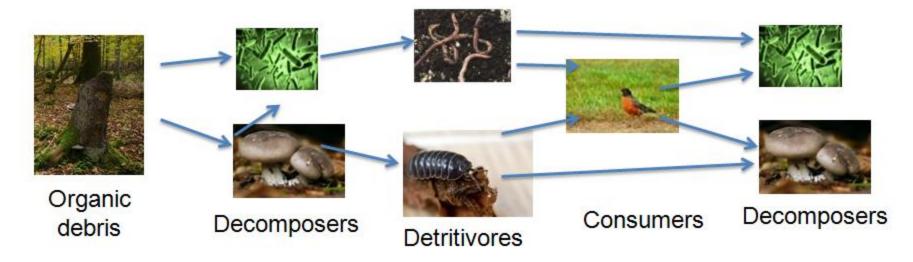
# **Grazing Food Web**



Starts with radiant energy captured by producers (plants) through photosynthesis, and continues with energy flow from producers to consumers and finally to decomposers.



## **Detrital Food Web**



Starts with chemical energy stored in organic debris or waste from other food webs; continues energy flow from debris directly to decomposers that break down the organic matter, which then becomes food and energy for large and larger consumers, and eventually decomposers.



## Producers





Organisms that make complex, energycontaining biomolecules from simple inorganic molecules using energy captured from light or inorganic chemical compounds.



### Consumers





# An organism that must consume other organisms for nutrients.



### Herbivores



#### Organisms that consume only plants.



### Carnivores



#### Animals that eat other animals.



## **Primary Consumers**



# An organism that gets their energy by feeding on producers in the food chain.



## **Secondary Consumers**



Aphids eat plants, and ladybugs eat aphids.

#### Animals that eat other animals that eat plants.



## **Tertiary Consumers**



#### Animals that eat secondary consumers.



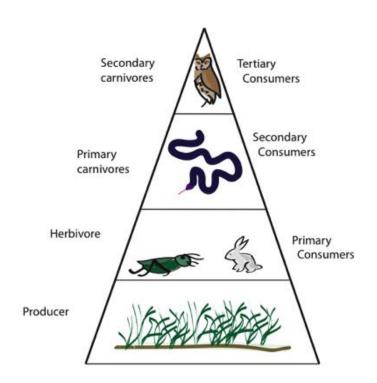
#### Decomposers



Organisms such as bacteria and fungi that break down the remains of dead plants and animals without need for internal digestion.



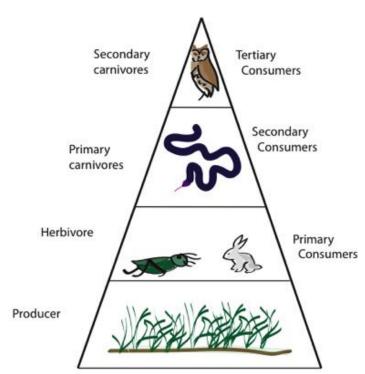
# **Trophic Level**



# The position an organism occupies on the food web.



# **Energy Pyramid**



# A diagram that shows the trophic levels of organisms in a food web.



### Ecosystem



#### A system comprising all the biotic and abiotic factors in an area and all the interactions among them.

