

Identify how organisms obtain food for energy.

Producers, Consumers, Decomposers

Read This:

All of Earth's ecosystems are made of producers, consumers, and decomposers. This is how energy flows from one organism to another. Most energy originates from the sun. Then various plants use the energy from the sun to make their own food. Organisms that can make their own food are called producers. Plants such as trees, bushes, and grasses are some common producers. Then there are organisms that eat the producers and other organisms for their energy. They must eat their food for energy, because they cannot produce their own food. These are called consumers. Animals such as birds, humans, and lions are consumers. Eventually, all living organisms die. When they die, decomposers break down their remains and return the raw material to the Earth. Here is a chart illustrating energy flow within an ecosystem:

Sun – Producers – Consumers ... Decomposers break down dead producers and consumers.

There are several types of consumers. They are
Herbivores – organisms that eat only plants
examples... cows, deer, caterpillars
Carnivores – organisms that eat other animals
examples... lions, spiders, snakes
Omnivores – organisms that eat both plants and animals
examples... most humans, bears, and many birds
Scavengers – organisms that eat of the remains of dead animals
examples... catfish and vultures

Here are two more important terms:
Predator – the organism that kills another organism for food
Prey – the organism that is killed

Answer These:

1. Where does most energy enter into an ecosystem from?
 - A. consumers
 - B. decomposers
 - C. producers
 - D. the sun
2. Herbivores, carnivores, omnivores, and scavengers can all be classified as
 - A. consumers
 - B. decomposers
 - C. parasites
 - D. producers

Identify how organisms obtain food for energy.

3. An aquarium container is filled with water and colonies of aquatic plants and animals. Various protists are added and the aquarium is then sealed and placed on a window ledge. The energy needed to maintain this ecosystem originates from the
 - A. fish.
 - B. green plants.
 - C. sun.
 - D. water.

4. As you observe deer, you notice that they only eat acorns and grains. What would you classify deer as according to this diet?
 - A. carnivore
 - B. herbivore
 - C. omnivore
 - D. scavenger

5. As you are driving along the highway, you see a vulture eating on the remains of a dead animal. What would the vulture be classified as?
 - A. carnivore
 - B. herbivore
 - C. producer
 - D. scavenger

6. A Grizzly's diet consists mainly of roots and berries. However, on occasion Grizzlies will eat salmon from a river. What would the Grizzly be classified as?
 - A. carnivore
 - B. decomposer
 - C. herbivore
 - D. omnivore

7. Lions are some of the fiercest animals in the African savannas. They have been known to be able to take down even the powerful Water Buffalo. What would lions be classified as?
 - A. carnivore
 - B. herbivore
 - C. omnivore
 - D. scavenger

Identify how organisms obtain food for energy.

8. Lions and hawks hunt and kill other living organisms before eating them. Based on this mode of nutrition, lions and hawks are classified as
- A. herbivore
 - B. decomposer
 - C. predator
 - D. saprophyte

9. Which term best describes the bird and the cat in the following pattern of energy flow?

sun - grass - grasshopper - bird – cat

- A. herbivore
 - B. predator
 - C. prey
 - D. scavenger
10. A cat captures and eats a mouse. The mouse is best described as the
- A. decomposer
 - B. host
 - C. prey
 - D. saprophyte
11. Bacteria and fungi breakdown waste and dead animal remains. They are best classified as
- A. decomposers
 - B. producers
 - C. saprophytes
 - D. scavengers
12. All of the following are examples of producers except
- A. birds.
 - B. cacti.
 - C. grass.
 - D. seaweed.
13. When a jellyfish uses its poisonous tentacles to paralyze a tiny fish to consume, the tiny fish is the
- A. host.
 - B. parasite.
 - C. predator.
 - D. prey.

Identify how organisms obtain food for energy.

14. Define the following terms:

- A. producer –
- B. consumer –
- C. decomposer –
- D. carnivore –
- E. herbivore –
- F. omnivore –
- G. scavenger –
- H. predator –
- I. prey –