

Name \_\_\_\_\_

## Interdependence among Living Systems Review

1) Define the Following:

- Producer – “Produces” its own food; an organism that goes through photosynthesis; PLANTS
- Consumer – “Consumes” other organisms for nutrients; EATS
- Decomposer – An organism that breaks down the body of dead plants and animals
- Predator – An organism that hunts and eats another organism
- Predation – A relationship where a predator hunts and eats a prey
- Prey – An organism that is hunted and eaten
- Biotic Factor – “BBBBBBORN” Living factors in an ecosystem, Plants and animals
- Abiotic Factor – Non-living factors in an ecosystem: light, space, temperature, water, soil
- Parasite – An organisms that uses another organism for nutrients; example: ticks, fleas
- Host - An organism that is used by another organism for nutrients; it is harmed

2) What are Insecticides and pesticides and how do they affect the food web if they are used?

They are used to kill insects; the number of insects would decrease and cause the number of predators to decrease over time

3) What is competition?

When organisms compete for food, shelter, and other abiotic and biotic factors

4) Why is a Mistletoe plant considered a parasite? Why is the tree it lives on considered a host?

Mistletoe plants live on trees and use the trees nutrients to survive. It feeds off of the trees nutrients so it is a parasite. The tree is being harmed by the Mistletoe so it is the host.

5) What are several ways humans depend on ocean systems?

Transportation, Oil, Natural gas, natural resources, food, minerals

6) What are some negative impacts that humans have on ocean systems?

Pollution, Trash, destroying reefs, overfishing,, endangering animals

7) What are artificial reefs and how do they positively help ocean systems?

Man made reefs that are used to provide ocean organisms with a new habitat

8) What are some environmental changes caused by humans that have a negative effect on the environment?

Pollution, trash, destroying reefs, endangering animals, clearing land, use of pesticides

9) What would happen in a food web if the predator population increased?

Prey population would decrease

10) What would happen if the prey population increased?

Predator population would increase

11) What is Parasitism? Why are ticks harmful to dogs? Which organism is the parasite and which is the host?

An organism uses another organism for nutrients and harms the organism. Ticks steal nutrients from dogs by sucking their blood. Dog is the host and Tick is the Parasite

12) What will happen to an organism that cannot adapt to changes in their environment?

It will die

13) Which organism is always found at the base/bottom of a food web or food pyramid?

Producers/Plants

14) What provides energy to the food web?

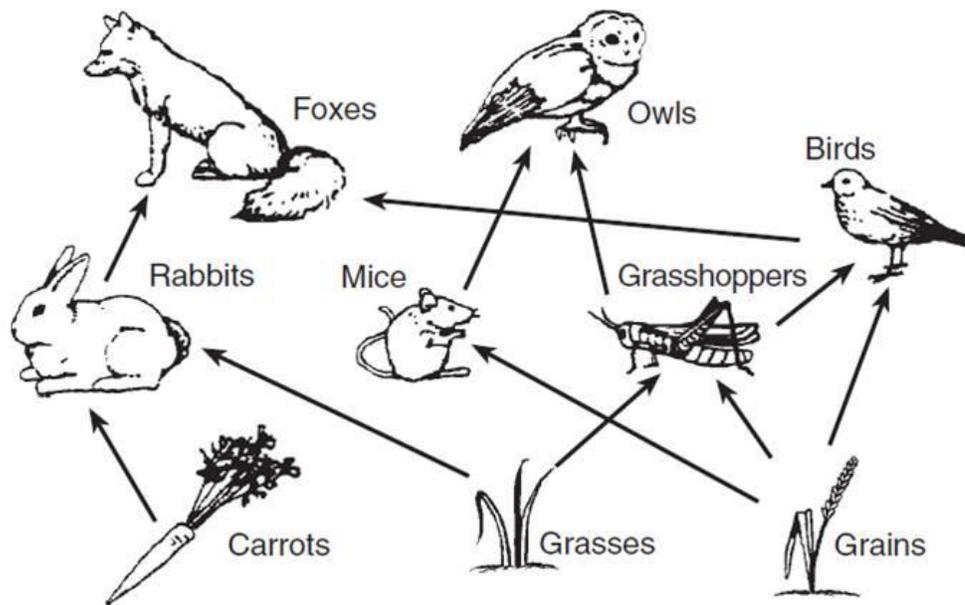
The Sun

15) What are 3 Short Term Environmental Changes?

Drought, Flooding, Localized Pollution

16) What are 6 Long Term Environmental Changes?

Deforestation, Volcanic Eruptions, Underwater Volcanoes and Vents, Flooding due to Dam building, Nuclear disaster, Global warming



17) Which organism or organisms prey on the grasshopper?

**Birds and Owls**

18) What are 2 predator/prey relationships that occur in this food web?

**Fox preys on Rabbit; Fox preys on Bird, Owl preys on Mice; Owl preys on Grasshopper;  
Bird preys on Grasshopper**

19) Which organisms are considered consumers in this food web? (Hint: there are 6)

**Foxes, Rabbits, Mice, Owls, Grasshoppers, and Birds**

20) Which organisms are considered producers? (Hint: there are 3)

**Carrots, Grasses, and Grains**

21) Which organisms compete for grain as a food source?

**Birds and Grasshoppers**

22) Which organism is considered a predator and a prey?

**Birds**

23) What biotic factor are the grasshopper and rabbit competing for?

**Grasses**

24) Name 2 producer/consumer relationships in this food web.

**Rabbits are the consumer and carrots are the producer**

**Rabbits are the consumer and grasses are the producer**

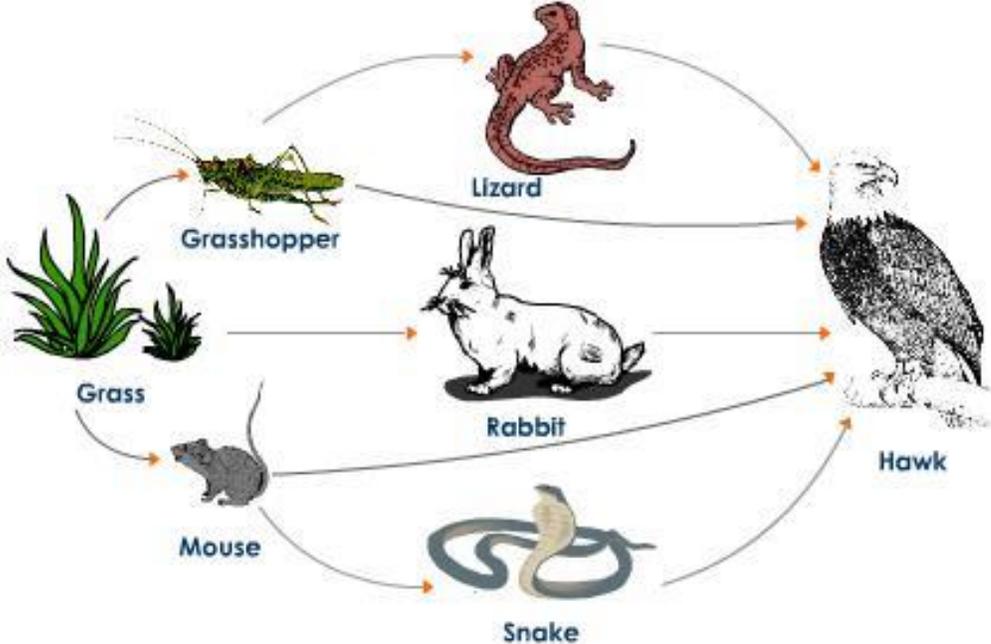
**Mice are the consumer and grains are the producer**

**Grasshoppers are the consumer and grasses are the producer**

**Grasshoppers are the consumer and grains are the producer**

**Birds are the consumer and grains are the producer**

Use the Food web to complete the energy pyramid.



A Food Web in a Grassland Ecosystem With Five Possible Food Chains

