

Food Web Assessment

Answer all questions to the best of your ability. Use diagrams or short explanations when necessary.

1: Multiple Choice (1 point each)

Which of the following is an example of a primary consumer?

- a) Hawk
- b) Grasshopper
- c) Snake
- d) Mushroom

The ultimate source of energy in most food webs is:

- a) Producers
- b) Detritivores
- c) The sun
- d) Top predators

A decrease in the population of a secondary consumer would likely lead to:

- a) An increase in primary consumer populations
- b) A decrease in producer populations
- c) An increase in top predator populations
- d) No change in other populations

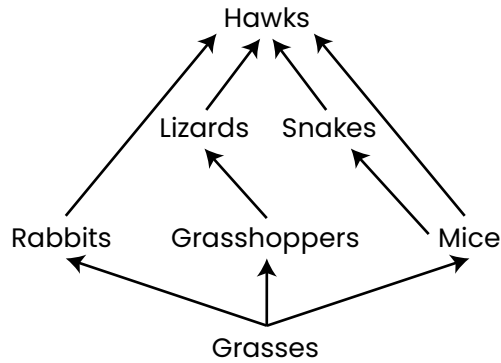
2: Fill in the Blanks (2 points each)

Organisms that break down dead organic matter are known as

The transfer of energy from one trophic level to the next is often represented by a

A complex network of interconnected food chains within an ecosystem is called a

3: Diagram Analysis (5 points)



Identify the following in the food web:

One producer _____

One herbivore _____

One tertiary consumer _____

If the population of the producer increases significantly, describe the potential impact on two other organisms in the food web.

4: Short Answer (4 points each)

Explain the concept of biomagnification. Provide an example of how this process might affect organisms in a food web.

Discuss the differences between a food chain and a food web. Explain why a food web provides a more realistic representation of energy flow in an ecosystem.