

Student Name: _____

Class: _____

Due Date: _____

Introduction

What is a Food Chain?

A food chain is a series of events where one organism is eaten by another. Each level in the chain is called a trophic level.

Importance of Food Chains

Food chains are important because they show how energy is transferred from one organism to another in an ecosystem.

Read the following passage and answer the questions:

A food chain is a chain of events where one organism is eaten by another. Producers, such as plants, make their own food through photosynthesis. Consumers, such as animals, eat other organisms to get energy. Decomposers, such as bacteria and fungi, break down dead organisms to return nutrients to the soil.

1. What is a food chain?

2. What are producers, consumers, and decomposers?

3. Why are food chains important?

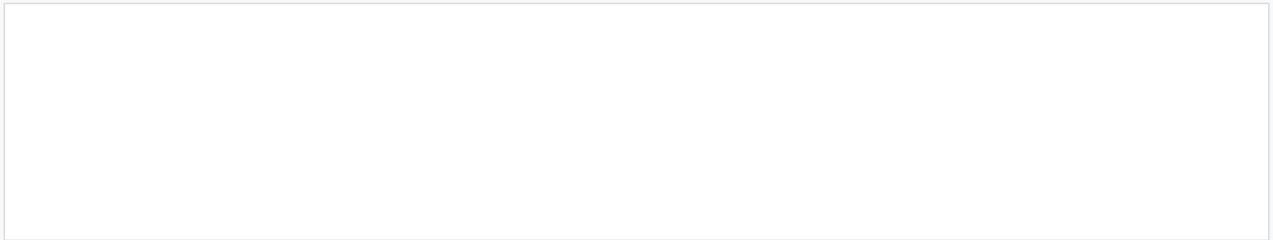
Drawing a Food Chain

Draw a simple food chain diagram, including producers, consumers, and decomposers. For example:

Producer (plant) → Primary Consumer (herbivore) → Secondary Consumer (carnivore) → Decomposer (bacteria)

Requirements:

- Include at least three different organisms
- Use arrows to show the direction of energy flow



Fill in the Blanks

Complete the following sentences:

1. Producers make their own food through _____.

2. Consumers get energy by _____.

3. Decomposers return nutrients to the soil by _____.

Case Study

Analyze the following food chain example:

Grassland ecosystem: Grass (producer) → Ants (primary consumer) → Snakes (secondary consumer) → Hawks (top predator) → Bacteria (decomposer)

1. What is the role of grass in the food chain?


2. What is the relationship between snakes and hawks?

3. How would a decrease in grass affect the food chain?

Food Chain Diagram

Draw a food chain diagram using the following organisms:

- Grass
- Ants
- Snakes
- Hawks
- Bacteria



Short Answer Questions

1. What is the difference between a producer and a consumer?

2. How do decomposers help the ecosystem?

3. Give an example of a food chain in a forest ecosystem.

Extension Activity

Create a food web model, including multiple food chains and relationships between organisms.

Research

Research a specific ecosystem (such as a forest, grassland, or ocean) and analyze its food chain and food web structure.

Conclusion

Success Criteria:

- Define the concept of a food chain and its importance
- Identify the different components of a food chain, including producers, consumers, and decomposers
- Explain the role of each component in the food chain
- Recognize the relationships between organisms in a food chain