

Food Chains and Food Webs Vocabulary

Term	Definition	Example Sentence
ecosystem	a community of living organisms and their interactions with the environment.	The coral reef is a diverse ecosystem with many different species.
trophic level	the position an organism occupies in a food chain or food web.	As a top predator, the lion occupies a high trophic level in the African savannah food web.
producers	organisms that make their own food using sunlight and nutrients.	Plants are producers because they use photosynthesis to convert sunlight into energy.
consumers	organisms that obtain energy by eating other organisms.	Lions and tigers are consumers because they eat other animals for food.
decomposers	organisms that break down dead things and recycle nutrients back into the ecosystem.	Bacteria and fungi are decomposers that play an important role in the decomposition process.

Food Chains and Food Webs: Reading Passage

Have you ever wondered how energy and nutrients flow through an ecosystem? Well, food chains and food webs can help us understand this! **[1][4]**

A food chain is like a line of organisms that eat each other. It shows how energy and nutrients pass from one organism to another. For example, a food chain could be grass, cow, and then human. But sometimes, it's not that simple! Sometimes, an organism can eat different things. That's where a food web comes in. A food web is like a bunch of food chains all connected together. It shows all the different things an organism can eat and be eaten by. **[1][2]**

In a food chain or food web, each organism has a different role called a trophic level. Producers, like plants, make their own food using sunlight and nutrients. Consumers, like animals, eat other organisms for food. And decomposers, like bacteria and fungi, break down dead things and recycle nutrients back into the ecosystem. **[2][5]**

Energy and nutrients flow through a food chain or food web. Energy comes from the sun and is used by producers to make food. Then, herbivores eat the producers and get some of that energy. Carnivores eat the herbivores, and so on. But each time energy is transferred, some of it is lost as heat. That's why there are usually more producers than consumers in a food chain or food web. **[3][6]**

Food chains and food webs help us understand how organisms in an ecosystem interact with each other and depend on each other for food. They show us the balance that exists in nature. So next time you see a hamburger or a salad, remember that you're part of a food chain too!

Sources:

[1] Food chains & food webs (article) | Ecology - Khan Academy

<https://www.khanacademy.org/science/ap-biology/ecology-ap/energy-flow-through-ecosystems/a/food-chains-food-webs>

[2] Food Web - National Geographic Society

<https://www.nationalgeographic.org/encyclopedia/food-web/>

[3] Life on the Food Chain

https://www2.nau.edu/lrm22/lessons/food_chain/food_chain.html

[4] 6.4: Food Chains and Food Webs - Biology LibreTexts

[https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Introductory_Biology_\(CK-12\)/06%3A_Ecology/6.04%3A_Food_Chains_and_Food_Webs](https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Introductory_Biology_(CK-12)/06%3A_Ecology/6.04%3A_Food_Chains_and_Food_Webs)

[5] Food Chains and Food Webs - GeeksforGeeks

<https://www.geeksforgeeks.org/food-chains-and-food-webs/>

[6] 11.4: Food Chains and Food Webs - Geosciences LibreTexts

[https://geo.libretexts.org/Bookshelves/Oceanography/Oceanography_\(Hill\)/11%3A_Food_Webs_and_Ocean_Productivity/11.4%3A_Food_Chains_and_Food_Webs](https://geo.libretexts.org/Bookshelves/Oceanography/Oceanography_(Hill)/11%3A_Food_Webs_and_Ocean_Productivity/11.4%3A_Food_Chains_and_Food_Webs)

Reading Summary

- Food chains show how energy and nutrients pass from one organism to another.
- Food webs are like a bunch of food chains connected together, showing what organisms eat and are eaten by.
- Producers make their own food using sunlight and nutrients, consumers eat other organisms, and decomposers recycle nutrients back into the ecosystem.

Multiple Choice Questions

Question #1	Question #2	Question #3
What is the role of decomposers in a food chain or food web?	How does energy flow through a food chain or food web?	What is the main idea of this passage?
<ul style="list-style-type: none">A. Decomposers break down dead things and recycle nutrients back into the ecosystem.B. Decomposers make their own food using sunlight and nutrients.C. Decomposers eat other organisms for food.D. Decomposers are at the top of the trophic level.	<ul style="list-style-type: none">A. Energy comes from the sun and is used by producers to make food. Then, herbivores eat the producers and get some of that energy.B. Energy comes from the sun and is used by consumers to make food. Then, producers eat the consumers and get some of that energy.C. Energy comes from the sun and is directly absorbed by decomposers.D. Energy comes from the sun and is equally distributed among all organisms in the food chain.	<ul style="list-style-type: none">A. Food chains and food webs show us how energy flows through an ecosystem.B. Producers are the most important organisms in a food chain or food web.C. Consumers play a minor role in a food chain or food web.D. Food chains and food webs are not important in understanding ecosystems.

Short Answer Questions

Question #1

What is a food chain?

Question #2

What is a food web?

Question #3

Why are there usually more producers than consumers in a food chain or food web?

Open Ended Questions

Question #1

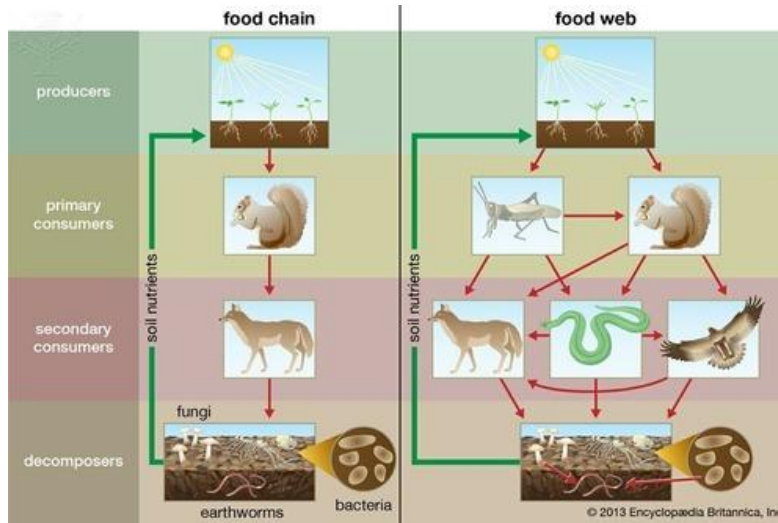
How does the concept of food chains and food webs relate to your own life?

Question #2

Can you think of any examples of food chains or food webs in your local environment? Explain.

Question #3

Why is it important for organisms in an ecosystem to depend on each other for food?



Food Chains and Food Webs - Answer Key

Multiple Choice Questions

Question #1	Question #2	Question #3
What is the role of decomposers in a food chain or food web?	How does energy flow through a food chain or food web?	What is the main idea of this passage?
<p>A. Decomposers break down dead things and recycle nutrients back into the ecosystem.</p> <p>B. Decomposers make their own food using sunlight and nutrients.</p> <p>C. Decomposers eat other organisms for food.</p> <p>D. Decomposers are at the top of the trophic level.</p>	<p>A. Energy comes from the sun and is used by producers to make food. Then, herbivores eat the producers and get some of that energy.</p> <p>B. Energy comes from the sun and is used by consumers to make food. Then, producers eat the consumers and get some of that energy.</p> <p>C. Energy comes from the sun and is directly absorbed by decomposers.</p> <p>D. Energy comes from the sun and is equally distributed among all organisms in the food chain.</p>	<p>A. Food chains and food webs show us how energy flows through an ecosystem.</p> <p>B. Producers are the most important organisms in a food chain or food web.</p> <p>C. Consumers play a minor role in a food chain or food web.</p> <p>D. Food chains and food webs are not important in understanding ecosystems.</p>

Short Answer Questions

Question #1	What is a food chain?
Answer:	<i>A food chain is a line of organisms that eat each other and shows how energy and nutrients pass from one organism to another.</i>
Question #2	What is a food web?
Answer:	<i>A food web is a bunch of food chains all connected together. It shows all the different things an organism can eat and be eaten by.</i>
Question #3	Why are there usually more producers than consumers in a food chain or food web?
Answer:	<i>There are usually more producers than consumers because each time energy is transferred, some of it is lost as heat.</i>