

Student: \_\_\_\_\_

1. The living organism that provides nutrients for a parasite is the
  - A. prey.
  - B. host.
  - C. predator.
  - D. scavenger.
2. What an animal uses for food is part of its
  - A. habitat.
  - B. niche.
  - C. competition.
  - D. None of these answers is correct.
3. An animal that feeds on living material but does not kill the animal it feeds on is a
  - A. prey.
  - B. host.
  - C. parasite.
  - D. predator.
4. A rabbit is eaten by a fox; this is an example of
  - A. a part of the rabbit's niche.
  - B. parasitism.
  - C. mutualism.
  - D. None of these answers is correct.
5. If a bass kills a perch and eats half the perch, and a crayfish feeds on the other half of the perch, the crayfish is
  - A. a parasite.
  - B. a predator.
  - C. a scavenger.
  - D. None of these answers is true.
6. If a habitat is where you live, a niche is
  - A. what you do there.
  - B. where you sleep.
  - C. the same thing.
  - D. None of these answers is true.
7. Among which of the following pairs of animals is competition likely to be most intense?
  - A. hummingbirds—honeybees
  - B. wolves—bison
  - C. grasshoppers—honeybees
  - D. mature white oak trees—young white oak trees
8. Species A and species B both benefit by living together. This is an example of
  - A. competition.
  - B. commensalism.
  - C. mutualism.
  - D. succession.

9. A suitable habitat would furnish an animal with
  - A. food.
  - B. shelter.
  - C. water.
  - D. All of these answers are true.
10. An animal that kills for food is a
  - A. predator.
  - B. parasite.
  - C. scavenger.
  - D. All of these answers are true.
11. A tapeworm living in a person's intestine is
  - A. a vector.
  - B. an internal parasite.
  - C. a mutualistic organism.
  - D. a predator.
12. All of the following are examples of symbiotic relationships except
  - A. algae and fungi living together as a lichen.
  - B. the protozoa that live in the intestine of termites and digest cellulose that termites cannot digest.
  - C. the mosquito that visits a mammal for a blood meal.
  - D. the malaria parasite that lives in the liver of humans.
13. When two species are harmed, it's called
  - A. mutualism.
  - B. commensalism.
  - C. competition.
  - D. predation.
14. Protozoa that live in the gut of a termite and help to digest wood are engaged in
  - A. mutualism.
  - B. competition.
  - C. communism.
  - D. amensalism.
15. Competition can occur for which of the following?
  - A. Food.
  - B. Space.
  - C. Mating.
  - D. All of these answers are true.
16. The introduction of foreign species into an area often causes problems because
  - A. they replace native species.
  - B. they compete with native species.
  - C. they cause the extinction of native species.
  - D. All of these answers are true.
17. The usual type of symbiotic relationship between humans and the bacteria normally found in their intestinal tract is that of
  - A. predator/prey.
  - B. parasitism.
  - C. mutualism.
  - D. communism.

18. A niche is
- A. a place where an organism lives.
  - B. the way an organism goes about living.
  - C. a place where you put yourself.
  - D. an animal that is able to slip through a narrow opening.
19. An animal that serves as food for other animals is a
- A. prey.
  - B. predator.
  - C. parasite.
  - D. symbiont.
20. The type of cooperation between two species of a community that is based on satisfying the needs of both species is called
- A. commensalism.
  - B. mutualism.
  - C. parasitism.
  - D. predation.
21. The most destructive activity of humans that has led to many extinctions is
- A. predator control.
  - B. pesticide use.
  - C. biomagnification.
  - D. habitat destruction.
22. Some kinds of shrimp obtain food by cleaning parasites from the surface of fish. This can be termed mutualism because
- A. neither participating member is damaged.
  - B. both members benefit from the relationship.
  - C. the shrimp benefit and their hosts are not injured.
  - D. the host fishes cannot survive without the shrimp.
23. A niche of a living organism is
- A. that place or localized region where it is usually found.
  - B. approximately the same narrow range for any organism.
  - C. usually capable of being continuously occupied by several species.
  - D. made up of many needs of the organism and interactions with its environment.
24. The interaction between two organisms, called commensalism,
- A. always benefits one of the organisms and does not affect the other.
  - B. does not fit either of the definitions of symbiosis.
  - C. is illustrated by the relationship between the shark and the fish that it eats.
  - D. includes all of these statements.
25. Which of the following would be an external parasite?
- A. a bird that aids large mammals by eating parasites in the skin of the large mammal
  - B. a fungus living on the dead remains of a tree
  - C. a cowbird that lays its eggs in the nest of another species of bird
  - D. a flea that lives among the feathers and feeds on the blood of a bird
26. A community
- A. is a population living in a certain habitat.
  - B. is a portion of a species making its home within a certain habitat.
  - C. includes those animals that only visit a habitat for food and drink.
  - D. includes all organisms that interact with one another within a local area.

27. An organism serving the role of host is a part of the interaction called
- competition.
  - mutualism.
  - parasitism.
  - predation.
28. The biome with the fewest seasonal changes is the
- temperate deciduous forest.
  - grassland.
  - tropical rain forest.
  - boreal coniferous forest.
29. An example of community is
- this class.
  - the various kinds of plants, animals, and bacteria in a vacant lot.
  - bees in a hive.
  - the water, soil, and air in a farmer's field.
30. If a species of insect provides most of the food for a particular species of bird, this is part of the bird's
- habitat.
  - environment.
  - niche.
  - range.
31. Some animal populations are kept in check by
- hosts.
  - decomposers.
  - amensalism.
  - predators.
32. Which of the following is NOT a community?
- a group of different species living in a pond
  - a forest
  - a population of rabbits
  - a pine tree and the organisms that live on it
33. When a bass feeds on a frog, the frog is the
- prey.
  - predator.
  - vector.
  - niche.
34. If an animal cannot digest a chemical but is able to pass out all the chemical as waste material, there is
- biomagnification.
  - succession.
  - no parasitism.
  - no biomagnification.
35. Which of the following is an example of a **biome**?
- tundra in Alaska
  - the lawn at your college
  - sugar cane fields
  - Australia

36. Biomagnification is concerned with
- succession.
  - organic molecules.
  - molecules that organisms cannot metabolize.
  - vectors.
37. Animal A kills animal D for food; animal C lives in animal D but does not harm D; animal B lives on the surface and sucks blood from D. The animal(s) that is/are a parasite on animal D is/are:
- A.
  - A and C.
  - B.
  - B and C.
38. An organism that carries a disease between hosts is a
- parasite.
  - predator.
  - vector.
  - All of these answers are true.
39. The biome with permafrost is
- tundra.
  - temperate deciduous forest.
  - desert.
  - temperate grassland.
40. If two animals are living together and the death of one results in the death of the other, the two animals were
- competitors.
  - vectors.
  - mutualistic.
  - predators.
41. If a relationship is harmful to both the animals in that relationship, the relationship is one of
- competition.
  - parasitism.
  - symbiosis.
  - mutualism.
42. A \_\_\_\_ is a pelagic animal.
- fish
  - slug
  - housefly
  - moose
43. The greatest diversity of **animals** is found in the
- tropical rainforest.
  - boreal coniferous forest.
  - tundra.
  - temperate deciduous forest.
44. Areas with low amounts of rainfall and moderate temperatures will develop a \_\_\_\_ biome.
- desert
  - temperate deciduous forest
  - temperate grassland
  - tundra

45. The specific place in the ecosystem occupied by an organism is the organism's
- niche.
  - range.
  - den.
  - habitat.
46. A pelagic animal is
- sessile.
  - a filter feeder.
  - a larval form.
  - a free swimmer.
47. The temperature does not go below freezing in the
- desert.
  - temperate grassland.
  - tropical rainforest.
  - desert or the tropical rainforest.
48. In biomagnification, the least concentration of a persistent organic molecule would be found in the
- herbivore.
  - producer.
  - omnivore.
  - carnivore.
49. Acacia trees provide food and shelter for ants. In turn ants protect the Acacia trees from herbivorous insects. This relationship exemplifies
- mutualism.
  - parasitism.
  - commensalism.
  - amensalism.
50. Many sponges and shellfish provide shelter for aquatic guests who do no harm or benefit to their host. This is an example of
- mutualism.
  - parasitism.
  - commensalism.
  - amensalism.
51. You live at the base of a mountain where there is a tropical forest. As you travel up the mountain you would expect
- the kinds of plants and animals to be similar at the base and top of the mountain.
  - the forest will change into a grassland.
  - to see organisms similar to those found in more northerly climates.
  - to find desert.
52. A tropical region that has large grassy areas with scattered trees is a
- prairie.
  - savanna.
  - tundra.
  - desert.
53. Which of the following would have the highest productivity?
- desert
  - tundra
  - temperate deciduous forest
  - the open ocean

54. This biome is located near oceans with wet, cool winters and hot, dry summers. Rainfall is 40 to 100 centimeters per year.
- A. prairie
  - B. savanna
  - C. tundra
  - D. chaparral
55. The euphotic zone is that region of the ocean where
- A. photosynthesis occurs.
  - B. there is a warm temperature.
  - C. sessile organisms are supported.
  - D. there is always light.
56. A large regional community is
- A. a biome.
  - B. the biosphere.
  - C. an ecosystem.
  - D. a trophic level.
57. A difference between a grassland and a savanna is
- A. the pattern of rainfall.
  - B. fire.
  - C. carnivores.
  - D. decomposers.
58. The tundra, boreal forest, and tropical savanna are all
- A. communities.
  - B. ecosystems.
  - C. food chains.
  - D. biomes.
59. The \_\_\_\_ has the greatest productivity.
- A. tundra
  - B. desert
  - C. boreal forest
  - D. tropical rainforest
60. An ecosystem has a long growing season, high species diversity, and rapid growth. It is most likely a
- A. desert.
  - B. tundra.
  - C. tropical rain forest.
  - D. northern coniferous forest.
61. Whether an area of the country will be a desert or grassland is primarily determined by
- A. the average temperature.
  - B. the average rainfall.
  - C. the length of the winter.
  - D. the kinds of animals in the area.
62. When a glacier retreats it leaves behind rocks and there is no living thing present. If succession occurs in such cases, one of the first processes that must take place is
- A. an increase in temperature.
  - B. an increase in the number of kinds of animals.
  - C. formation of soil.
  - D. reduction in the amount of water.

63. The productivity of an ecosystem
- A. can be measured in biomass produced.
  - B. can change depending on the stage of succession.
  - C. is dependent on such abiotic factors as; temperature, water, and sunlight.
  - D. All of these answers are true.
64. If a forest fire destroys a region of the forest,
- A. secondary succession will occur.
  - B. primary succession will occur.
  - C. a climax community is present in the burned area.
  - D. None of these answers is correct.
65. In a marsh community, aquatic plankton contain 0.04 ppm of DDT, small fish contain 0.30 ppm of DDT, larger fish contain 1.5 ppm of DDT, and cormorants (fish-eating birds) contain 24 ppm of DDT. This is an example of
- A. the carbon cycle.
  - B. succession.
  - C. nutrient cycling.
  - D. biomagnification.
66. Following a hurricane an area will become re-forested. This statement is best described by the term
- A. evolution.
  - B. succession.
  - C. trophic level.
  - D. pioneer community.
67. Acacia trees often have ants that live on them. The ants feed on materials produced by special structures called nectaries, which the tree produces. The ants will attack other animals that begin to feed on the tree and will even cut off small branches of other trees that come in contact with "their" tree. The relationship between Acacia trees and ants is called
- A. mutualism.
  - B. competition.
  - C. predator/prey.
  - D. parasite/host.
68. "At one time there was a shallow pond in this area. Now it has all filled in and is a field." This statement would best describe
- A. climax community.
  - B. primary succession.
  - C. secondary succession.
  - D. pioneer community.
69. Persistent pollutants that accumulate in living tissue will be most concentrated in the bodies of
- A. producers.
  - B. decomposers.
  - C. carnivores.
  - D. herbivores.
70. These organisms live either attached to a substrate or free-living on the ocean floor.
- A. benthic
  - B. plankton
  - C. pelagic
  - D. littoral
71. The last stage of succession is the
- A. early community.
  - B. climax community.
  - C. biome community.
  - D. pioneer community.



72. The term "ecological succession" refers to
- the flow of energy from producers to consumers.
  - replacement of one plant community by another.
  - successive seasons of the year that guide the growth of ecosystems.
  - an unending series of geological events that occur in all areas.
73. You would find primary succession at(on)
- rock exposed by glaciers.
  - a prairie destroyed by fire.
  - an abandoned agricultural field.
  - a clear-cut forest.
74. A stable, long-lasting community is a
- successional community.
  - pioneer community.
  - climax community.
  - sere.
75. A correct successional sequence is represented by
- grasses → mosses → herbs → trees → shrubs.
  - trees → shrubs → mosses → herbs → grasses.
  - herbs → grasses → mosses → shrubs → trees.
  - mosses → herbs → grasses → shrubs → trees.
76. Which of the following is most likely to be found in a pioneer community?
- small trees
  - well-developed soil
  - few kinds of organisms
  - no organisms
77. Which of these are likely to be pioneer organisms?
- lichens, moss, grass, and insects
  - elephants and deer
  - rabbits, grass, trees, and birds
  - mice and men
78. Which is most likely an example of pioneer **plants**?
- weeds growing in the grassland
  - algae on a bare rock
  - maple tree forest
  - Indian corn
79. A \_\_\_\_ is a pioneer organism.
- shrub
  - lichen
  - tree
  - raccoon
80. Organisms that are NOT attached to the bottom of an aquatic ecosystem are termed
- benthic.
  - abyssal.
  - pelagic.
  - scavengers.

81. Small aquatic **organisms** that are carried by currents are termed
- A. benthic.
  - B. plankton.
  - C. pelagic.
  - D. abyssal.
82. The \_\_\_\_\_ zone is the upper region of the ocean where the sun's rays penetrate.
- A. benthic
  - B. euphotic
  - C. abyssal
  - D. littoral

## 16 Key

1. The living organism that provides nutrients for a parasite is the
- A. prey.
  - B.** host.
  - C. predator.
  - D. scavenger.

*Blooms Level: 1. Remember*

*Enger - Chapter 16 #1*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*

*Section: 16.03*

*Topic: Community Ecology*

2. What an animal uses for food is part of its
- A. habitat.
  - B.** niche.
  - C. competition.
  - D. None of these answers is correct.

*Blooms Level: 1. Remember*

*Enger - Chapter 16 #2*

*Learning Outcome: Describe an organisms niche, habitat, and community.*

*Section: 16.02*

*Topic: Community Ecology*

3. An animal that feeds on living material but does not kill the animal it feeds on is a
- A. prey.
  - B. host.
  - C.** parasite.
  - D. predator.

*Blooms Level: 1. Remember*

*Enger - Chapter 16 #3*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*

*Section: 16.03*

*Topic: Community Ecology*

4. A rabbit is eaten by a fox; this is an example of
- A.** a part of the rabbit's niche.
  - B. parasitism.
  - C. mutualism.
  - D. None of these answers is correct.

*Blooms Level: 1. Remember*

*Enger - Chapter 16 #4*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*

*Section: 16.03*

*Topic: Community Ecology*

5. If a bass kills a perch and eats half the perch, and a crayfish feeds on the other half of the perch, the crayfish is
- A. a parasite.
  - B. a predator.
  - C.** a scavenger.
  - D. None of these answers is true.

*Blooms Level: 1. Remember*

*Enger - Chapter 16 #5*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*

*Section: 16.03*

*Topic: Community Ecology*

6. If a habitat is where you live, a niche is  
**A.** what you do there.  
B. where you sleep.  
C. the same thing.  
D. None of these answers is true.

*Blooms Level: 2. Understand*  
*Enger - Chapter 16 #6*  
*Learning Outcome: Explain the difference between niche and habitat.*  
*Section: 16.02*  
*Topic: Community Ecology*

7. Among which of the following pairs of animals is competition likely to be most intense?  
A. hummingbirds—honeybees  
B. wolves—bison  
C. grasshoppers—honeybees  
**D.** mature white oak trees—young white oak trees

*Blooms Level: 2. Understand*  
*Enger - Chapter 16 #7*  
*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*  
*Section: 16.03*  
*Topic: Community Ecology*

8. Species A and species B both benefit by living together. This is an example of  
A. competition.  
B. commensalism.  
**C.** mutualism.  
D. succession.

*Blooms Level: 2. Understand*  
*Enger - Chapter 16 #8*  
*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*  
*Section: 16.03*  
*Topic: Community Ecology*

9. A suitable habitat would furnish an animal with  
A. food.  
B. shelter.  
C. water.  
**D.** All of these answers are true.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #9*  
*Learning Outcome: Explain the difference between niche and habitat.*  
*Section: 16.02*  
*Topic: Community Ecology*

10. An animal that kills for food is a  
**A.** predator.  
B. parasite.  
C. scavenger.  
D. All of these answers are true.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #10*  
*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*  
*Section: 16.03*  
*Topic: Community Ecology*

11. A tapeworm living in a person's intestine is  
A. a vector.  
**B.** an internal parasite.  
C. a mutualistic organism.  
D. a predator.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #11*  
*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*  
*Section: 16.03*  
*Topic: Community Ecology*

12. All of the following are examples of symbiotic relationships except
- A. algae and fungi living together as a lichen.
  - B. the protozoa that live in the intestine of termites and digest cellulose that termites cannot digest.
  - C.** the mosquito that visits a mammal for a blood meal.
  - D. the malaria parasite that lives in the liver of humans.

Blooms Level: 1. Remember  
Enger - Chapter 16 #12

Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03

Topic: Community Ecology

13. When two species are harmed, it's called
- A. mutualism.
  - B. commensalism.
  - C.** competition.
  - D. predation.

Blooms Level: 1. Remember  
Enger - Chapter 16 #13

Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03

Topic: Community Ecology

14. Protozoa that live in the gut of a termite and help to digest wood are engaged in
- A.** mutualism.
  - B. competition.
  - C. communism.
  - D. amensalism.

Blooms Level: 1. Remember  
Enger - Chapter 16 #14

Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03

Topic: Community Ecology

15. Competition can occur for which of the following?
- A. Food.
  - B. Space.
  - C. Mating.
  - D.** All of these answers are true.

Blooms Level: 1. Remember  
Enger - Chapter 16 #15

Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03

Topic: Community Ecology

16. The introduction of foreign species into an area often causes problems because
- A. they replace native species.
  - B. they compete with native species.
  - C. they cause the extinction of native species.
  - D.** All of these answers are true.

Blooms Level: 1. Remember  
Enger - Chapter 16 #16

Learning Outcome: Describe the impact of introduced species, predator control, and habitat destruction on natural communities.  
Section: 16.07

Topic: Community Ecology

17. The usual type of symbiotic relationship between humans and the bacteria normally found in their intestinal tract is that of
- A. predator/prey.
  - B. parasitism.
  - C.** mutualism.
  - D. communism.

Blooms Level: 1. Remember  
Enger - Chapter 16 #17

Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03

Topic: Community Ecology

18. A niche is  
A. a place where an organism lives.  
**B.** the way an organism goes about living.  
C. a place where you put yourself.  
D. an animal that is able to slip through a narrow opening.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #18*  
*Learning Outcome: Explain the difference between niche and habitat.*  
*Section: 16.02*  
*Topic: Community Ecology*

19. An animal that serves as food for other animals is a  
**A.** prey.  
B. predator.  
C. parasite.  
D. symbiont.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #19*  
*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*  
*Section: 16.02*  
*Topic: Community Ecology*

20. The type of cooperation between two species of a community that is based on satisfying the needs of both species is called  
A. commensalism.  
**B.** mutualism.  
C. parasitism.  
D. predation.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #20*  
*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*  
*Section: 16.03*  
*Topic: Community Ecology*

21. The most destructive activity of humans that has led to many extinctions is  
A. predator control.  
B. pesticide use.  
C. biomagnification.  
**D.** habitat destruction.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #21*  
*Learning Outcome: Relate extinctions to human activities.*  
*Section: 16.07*  
*Topic: Community Ecology*

22. Some kinds of shrimp obtain food by cleaning parasites from the surface of fish. This can be termed mutualism because  
A. neither participating member is damaged.  
**B.** both members benefit from the relationship.  
C. the shrimp benefit and their hosts are not injured.  
D. the host fishes cannot survive without the shrimp.

*Blooms Level: 2. Understand*  
*Enger - Chapter 16 #22*  
*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*  
*Section: 16.03*  
*Topic: Community Ecology*

23. A niche of a living organism is  
A. that place or localized region where it is usually found.  
B. approximately the same narrow range for any organism.  
C. usually capable of being continuously occupied by several species.  
**D.** made up of many needs of the organism and interactions with its environment.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #23*  
*Learning Outcome: Describe an organisms niche, habitat, and community.*  
*Section: 16.02*  
*Topic: Community Ecology*

24. The interaction between two organisms, called commensalism,  
**A.** always benefits one of the organisms and does not affect the other.  
B. does not fit either of the definitions of symbiosis.  
C. is illustrated by the relationship between the shark and the fish that it eats.  
D. includes all of these statements.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #24*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

25. Which of the following would be an external parasite?  
A. a bird that aids large mammals by eating parasites in the skin of the large mammal  
B. a fungus living on the dead remains of a tree  
C. a cowbird that lays its eggs in the nest of another species of bird  
**D.** a flea that lives among the feathers and feeds on the blood of a bird

*Blooms Level: 1. Remember  
Enger - Chapter 16 #25*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

26. A community  
A. is a population living in a certain habitat.  
B. is a portion of a species making its home within a certain habitat.  
C. includes those animals that only visit a habitat for food and drink.  
**D.** includes all organisms that interact with one another within a local area.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #26*

*Learning Outcome: Describe an organisms niche, habitat, and community.  
Section: 16.04*

*Topic: Community Ecology*

27. An organism serving the role of host is a part of the interaction called  
A. competition.  
B. mutualism.  
**C.** parasitism.  
D. predation.

*Blooms Level: 2. Understand  
Enger - Chapter 16 #27*

*Learning Outcome: Describe an organisms niche, habitat, and community.  
Section: 16.03*

*Topic: Community Ecology*

28. The biome with the fewest seasonal changes is the  
A. temperate deciduous forest.  
B. grassland.  
**C.** tropical rain forest.  
D. boreal coniferous forest.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #28*

*Learning Outcome: Describe the effect humans have had on natural climax ecosystems.  
Learning Outcome: List typical abiotic and biotic characteristics of different biomes.*

*Section: 16.04*

*Topic: Community Ecology*

29. An example of community is  
A. this class.  
**B.** the various kinds of plants, animals, and bacteria in a vacant lot.  
C. bees in a hive.  
D. the water, soil, and air in a farmer's field.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #29*

*Learning Outcome: Describe an organisms niche, habitat, and community.  
Section: 16.04*

*Topic: Community Ecology*

30. If a species of insect provides most of the food for a particular species of bird, this is part of the bird's  
A. habitat.  
B. environment.  
**C. niche.**  
D. range.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #30  
Learning Outcome: Describe an organisms niche, habitat, and community.  
Section: 16.02  
Topic: Community Ecology*

31. Some animal populations are kept in check by  
A. hosts.  
B. decomposers.  
C. amensalism.  
**D. predators.**

*Blooms Level: 1. Remember  
Enger - Chapter 16 #31  
Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03  
Topic: Community Ecology*

32. Which of the following is NOT a community?  
A. a group of different species living in a pond  
B. a forest  
**C. a population of rabbits**  
D. a pine tree and the organisms that live on it

*Blooms Level: 2. Understand  
Enger - Chapter 16 #32  
Learning Outcome: Describe an organisms niche, habitat, and community.  
Section: 16.04  
Topic: Community Ecology*

33. When a bass feeds on a frog, the frog is the  
**A. prey.**  
B. predator.  
C. vector.  
D. niche.

*Blooms Level: 2. Understand  
Enger - Chapter 16 #33  
Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03  
Topic: Community Ecology*

34. If an animal cannot digest a chemical but is able to pass out all the chemical as waste material, there is  
A. biomagnification.  
B. succession.  
C. no parasitism.  
**D. no biomagnification.**

*Blooms Level: 2. Understand  
Enger - Chapter 16 #34  
Learning Outcome: Explain why persistent organic chemicals reach higher levels in carnivores than in herbivores.  
Section: 16.07  
Topic: Community Ecology*

35. Which of the following is an example of a **biome**?  
**A. tundra in Alaska**  
B. the lawn at your college  
C. sugar cane fields  
D. Australia

*Blooms Level: 1. Remember  
Enger - Chapter 16 #35  
Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04  
Topic: Community Ecology*



36. Biomagnification is concerned with  
A. succession.  
B. organic molecules.  
**C.** molecules that organisms cannot metabolize.  
D. vectors.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #36*

*Learning Outcome: Explain why persistent organic chemicals reach higher levels in carnivores than in herbivores.  
Section: 16.07*

*Topic: Community Ecology*

37. Animal A kills animal D for food; animal C lives in animal D but does not harm D; animal B lives on the surface and sucks blood from D. The animal(s) that is/are a parasite on animal D is/are:  
A. A.  
B. A and C.  
**C.** B.  
D. B and C.

*Blooms Level: 2. Understand  
Enger - Chapter 16 #37*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

38. An organism that carries a disease between hosts is a  
A. parasite.  
B. predator.  
**C.** vector.  
D. All of these answers are true.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #38*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

39. The biome with permafrost is  
**A.** tundra.  
B. temperate deciduous forest.  
C. desert.  
D. temperate grassland.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #39*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

40. If two animals are living together and the death of one results in the death of the other, the two animals were  
A. competitors.  
B. vectors.  
**C.** mutualistic.  
D. predators.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #40*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

41. If a relationship is harmful to both the animals in that relationship, the relationship is one of  
**A.** competition.  
B. parasitism.  
C. symbiosis.  
D. mutualism.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #41*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

42. A \_\_\_\_ is a pelagic animal.  
**A.** fish  
B. slug  
C. housefly  
D. moose

*Blooms Level: 1. Remember  
Enger - Chapter 16 #42*

*Learning Outcome: Describe an organisms niche, habitat, and community.  
Learning Outcome: Explain why some plants and animals are found only in certain parts of the world.  
Section: 16.05*

*Topic: Community Ecology*

43. The greatest diversity of **animals** is found in the  
**A.** tropical rainforest.  
B. boreal coniferous forest.  
C. tundra.  
D. temperate deciduous forest.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #43*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

44. Areas with low amounts of rainfall and moderate temperatures will develop a \_\_\_\_ biome.  
A. desert  
B. temperate deciduous forest  
**C.** temperate grassland  
D. tundra

*Blooms Level: 1. Remember  
Enger - Chapter 16 #44*

*Learning Outcome: Describe the effect of temperature and rainfall to the kind of biome that develops.  
Section: 16.04*

*Topic: Community Ecology*

45. The specific place in the ecosystem occupied by an organism is the organism's  
A. niche.  
B. range.  
C. den.  
**D.** habitat.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #45*

*Learning Outcome: Explain the difference between niche and habitat.  
Section: 16.02*

*Topic: Community Ecology*

46. A pelagic animal is  
A. sessile.  
B. a filter feeder.  
C. a larval form.  
**D.** a free swimmer.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #46*

*Learning Outcome: Explain why some plants and animals are found only in certain parts of the world.  
Section: 16.05*

*Topic: Community Ecology*

47. The temperature does not go below freezing in the  
A. desert.  
B. temperate grassland.  
**C.** tropical rainforest.  
D. desert or the tropical rainforest.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #47*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

48. In biomagnification, the least concentration of a persistent organic molecule would be found in the
- A. herbivore.
  - B. producer.**
  - C. omnivore.
  - D. carnivore.

*Blooms Level: 2. Understand  
Enger - Chapter 16 #48*

*Learning Outcome: Explain why persistent organic chemicals reach higher levels in carnivores than in herbivores.  
Section: 16.07*

*Topic: Community Ecology*

49. Acacia trees provide food and shelter for ants. In turn ants protect the Acacia trees from herbivorous insects. This relationship exemplifies
- A. mutualism.**
  - B. parasitism.
  - C. commensalism.
  - D. amensalism.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #49*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

50. Many sponges and shellfish provide shelter for aquatic guests who do no harm or benefit to their host. This is an example of
- A. mutualism.
  - B. parasitism.
  - C. commensalism.**
  - D. amensalism.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #50*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.  
Section: 16.03*

*Topic: Community Ecology*

51. You live at the base of a mountain where there is a tropical forest. As you travel up the mountain you would expect
- A. the kinds of plants and animals to be similar at the base and top of the mountain.
  - B. the forest will change into a grassland.
  - C. to see organisms similar to those found in more northerly climates.**
  - D. to find desert.

*Blooms Level: 2. Understand  
Enger - Chapter 16 #51*

*Learning Outcome: Describe the effect of temperature and rainfall to the kind of biome that develops.  
Learning Outcome: List typical abiotic and biotic characteristics of different biomes.*

*Section: 16.01*

*Section: 16.04*

*Topic: Community Ecology*

52. A tropical region that has large grassy areas with scattered trees is a
- A. prairie.
  - B. savanna.**
  - C. tundra.
  - D. desert.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #52*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.03*

*Topic: Community Ecology*

53. Which of the following would have the highest productivity?  
A. desert  
B. tundra  
**C.** temperate deciduous forest  
D. the open ocean

*Blooms Level: 1. Remember  
Enger - Chapter 16 #53*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

54. This biome is located near oceans with wet, cool winters and hot, dry summers. Rainfall is 40 to 100 centimeters per year.  
A. prairie  
B. savanna  
C. tundra  
**D.** chaparral

*Blooms Level: 1. Remember  
Enger - Chapter 16 #54*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

55. The euphotic zone is that region of the ocean where  
**A.** photosynthesis occurs.  
B. there is a warm temperature.  
C. sessile organisms are supported.  
D. there is always light.

*Blooms Level: 2. Understand  
Enger - Chapter 16 #55*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.05*

*Topic: Community Ecology*

56. A large regional community is  
**A.** a biome.  
B. the biosphere.  
C. an ecosystem.  
D. a trophic level.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #56*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

57. A difference between a grassland and a savanna is  
**A.** the pattern of rainfall.  
B. fire.  
C. carnivores.  
D. decomposers.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #57*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

58. The tundra, boreal forest, and tropical savanna are all  
A. communities.  
B. ecosystems.  
C. food chains.  
**D.** biomes.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #58*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.04*

*Topic: Community Ecology*

59. The \_\_\_\_ has the greatest productivity.
- A. tundra
  - B. desert
  - C. boreal forest
  - D.** tropical rainforest

*Blooms Level: 2. Understand*  
*Enger - Chapter 16 #59*  
*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.*  
*Section: 16.04*  
*Topic: Community Ecology*

60. An ecosystem has a long growing season, high species diversity, and rapid growth. It is most likely
- a
  - A. desert.
  - B. tundra.
  - C.** tropical rain forest.
  - D. northern coniferous forest.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #60*  
*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.*  
*Section: 16.04*  
*Topic: Community Ecology*

61. Whether an area of the country will be a desert or grassland is primarily determined by
- A. the average temperature.
  - B.** the average rainfall.
  - C. the length of the winter.
  - D. the kinds of animals in the area.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #61*  
*Learning Outcome: Describe the effect of temperature and rainfall to the kind of biome that develops.*  
*Section: 16.04*  
*Topic: Community Ecology*

62. When a glacier retreats it leaves behind rocks and there is no living thing present. If succession occurs in such cases, one of the first processes that must take place is
- A. an increase in temperature.
  - B. an increase in the number of kinds of animals.
  - C.** formation of soil.
  - D. reduction in the amount of water.

*Blooms Level: 2. Understand*  
*Enger - Chapter 16 #62*  
*Learning Outcome: Explain the concept of a climax community.*  
*Section: 16.06*  
*Topic: Community Ecology*

63. The productivity of an ecosystem
- A. can be measured in biomass produced.
  - B. can change depending on the stage of succession.
  - C. is dependent on such abiotic factors as; temperature, water, and sunlight.
  - D.** All of these answers are true.

*Blooms Level: 2. Understand*  
*Enger - Chapter 16 #63*  
*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.*  
*Section: 16.04*  
*Topic: Community Ecology*

64. If a forest fire destroys a region of the forest,
- A.** secondary succession will occur.
  - B. primary succession will occur.
  - C. a climax community is present in the burned area.
  - D. None of these answers is correct.

*Blooms Level: 1. Remember*  
*Enger - Chapter 16 #64*  
*Learning Outcome: Explain the concept of a climax community.*  
*Section: 16.06*  
*Topic: Community Ecology*

65. In a marsh community, aquatic plankton contain 0.04 ppm of DDT, small fish contain 0.30 ppm of DDT, larger fish contain 1.5 ppm of DDT, and cormorants (fish-eating birds) contain 24 ppm of DDT. This is an example of
- A. the carbon cycle.
  - B. succession.
  - C. nutrient cycling.
  - D. biomagnification.**

*Blooms Level: 1. Remember*

*Enger - Chapter 16 #65*

*Learning Outcome: Explain why persistent organic chemicals reach higher levels in carnivores than in herbivores.*

*Section: 16.07*

*Topic: Community Ecology*

66. Following a hurricane an area will become re-forested. This statement is best described by the term
- A. evolution.
  - B. succession.**
  - C. trophic level.
  - D. pioneer community.

*Blooms Level: 2. Understand*

*Enger - Chapter 16 #66*

*Learning Outcome: Explain the concept of a climax community.*

*Section: 16.06*

*Topic: Community Ecology*

67. Acacia trees often have ants that live on them. The ants feed on materials produced by special structures called nectaries, which the tree produces. The ants will attack other animals that begin to feed on the tree and will even cut off small branches of other trees that come in contact with "their" tree. The relationship between Acacia trees and ants is called
- A. mutualism.**
  - B. competition.
  - C. predator/prey.
  - D. parasite/host.

*Blooms Level: 2. Understand*

*Enger - Chapter 16 #67*

*Learning Outcome: Describe differences among predation, mutualism, competition, parasitism, and commensalism.*

*Section: 16.03*

*Topic: Community Ecology*

68. "At one time there was a shallow pond in this area. Now it has all filled in and is a field." This statement would best describe
- A. climax community.
  - B. primary succession.**
  - C. secondary succession.
  - D. pioneer community.

*Blooms Level: 2. Understand*

*Enger - Chapter 16 #68*

*Learning Outcome: Explain the concept of a climax community.*

*Section: 16.06*

*Topic: Community Ecology*

69. Persistent pollutants that accumulate in living tissue will be most concentrated in the bodies of
- A. producers.
  - B. decomposers.
  - C. carnivores.**
  - D. herbivores.

*Blooms Level: 1. Remember*

*Enger - Chapter 16 #69*

*Learning Outcome: Explain why persistent organic chemicals reach higher levels in carnivores than in herbivores.*

*Section: 16.07*

*Topic: Community Ecology*

70. These organisms live either attached to a substrate or free-living on the ocean floor.  
**A.** benthic  
B. plankton  
C. pelagic  
D. littoral

*Blooms Level: 1. Remember  
Enger - Chapter 16 #70*

*Learning Outcome: Explain why some plants and animals are found only in certain parts of the world.  
Section: 16.05*

*Topic: Community Ecology*

71. The last stage of succession is the  
A. early community.  
**B.** climax community.  
C. biome community.  
D. pioneer community.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #71*

*Learning Outcome: Explain the concept of a climax community.  
Section: 16.06*

*Topic: Community Ecology*

72. The term "ecological succession" refers to  
A. the flow of energy from producers to consumers.  
**B.** replacement of one plant community by another.  
C. successive seasons of the year that guide the growth of ecosystems.  
D. an unending series of geological events that occur in all areas.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #72*

*Learning Outcome: Explain the concept of a climax community.  
Section: 16.06*

*Topic: Community Ecology*

73. You would find primary succession at(on)  
**A.** rock exposed by glaciers.  
B. a prairie destroyed by fire.  
C. an abandoned agricultural field.  
D. a clear-cut forest.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #73*

*Learning Outcome: Explain the concept of a climax community.  
Section: 16.06*

*Topic: Community Ecology*

74. A stable, long-lasting community is a  
A. successional community.  
B. pioneer community.  
**C.** climax community.  
D. sere.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #74*

*Learning Outcome: Explain the concept of a climax community.  
Section: 16.06*

*Topic: Community Ecology*

75. A correct successional sequence is represented by  
A. grasses → mosses → herbs → trees → shrubs.  
B. trees → shrubs → mosses → herbs → grasses.  
C. herbs → grasses → mosses → shrubs → trees.  
**D.** mosses → herbs → grasses → shrubs → trees.

*Blooms Level: 5. Evaluate  
Enger - Chapter 16 #75*

*Learning Outcome: Explain the concept of a climax community.  
Section: 16.06*

*Topic: Community Ecology*

76. Which of the following is most likely to be found in a pioneer community?  
A. small trees  
B. well-developed soil  
**C.** few kinds of organisms  
D. no organisms

*Blooms Level: 1. Remember  
Enger - Chapter 16 #76*

*Learning Outcome: Explain the concept of a climax community.  
Learning Outcome: Explain why a vacant lot becomes a tangle of plants.  
Section: 16.06*

*Topic: Community Ecology*

77. Which of these are likely to be pioneer organisms?  
**A.** lichens, moss, grass, and insects  
B. elephants and deer  
C. rabbits, grass, trees, and birds  
D. mice and men

*Blooms Level: 1. Remember  
Enger - Chapter 16 #77*

*Learning Outcome: Explain the concept of a climax community.  
Learning Outcome: Explain why a vacant lot becomes a tangle of plants.  
Section: 16.06*

*Topic: Community Ecology*

78. Which is most likely an example of pioneer **plants**?  
A. weeds growing in the grassland  
**B.** algae on a bare rock  
C. maple tree forest  
D. Indian corn

*Blooms Level: 1. Remember  
Enger - Chapter 16 #78*

*Learning Outcome: Explain the concept of a climax community.  
Learning Outcome: Explain why a vacant lot becomes a tangle of plants.  
Section: 16.06*

*Topic: Community Ecology*

79. A \_\_\_\_ is a pioneer organism.  
A. shrub  
**B.** lichen  
C. tree  
D. raccoon

*Blooms Level: 2. Understand  
Enger - Chapter 16 #79*

*Learning Outcome: Explain the concept of a climax community.  
Learning Outcome: Explain why a vacant lot becomes a tangle of plants.  
Section: 16.06*

*Topic: Community Ecology*

80. Organisms that are NOT attached to the bottom of an aquatic ecosystem are termed  
A. benthic.  
B. abyssal.  
**C.** pelagic.  
D. scavengers.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #80*

*Learning Outcome: Explain why some plants and animals are found only in certain parts of the world.  
Section: 16.05*

*Topic: Community Ecology*

81. Small aquatic **organisms** that are carried by currents are termed  
A. benthic.  
**B.** plankton.  
C. pelagic.  
D. abyssal.

*Blooms Level: 1. Remember  
Enger - Chapter 16 #81*

*Learning Outcome: Explain why some plants and animals are found only in certain parts of the world.  
Section: 16.05*

*Topic: Community Ecology*



82. The \_\_\_\_\_ zone is the upper region of the ocean where the sun's rays penetrate.
- A. benthic
  - B. euphotic**
  - C. abyssal
  - D. littoral

*Blooms Level: 1. Remember  
Enger - Chapter 16 #82*

*Learning Outcome: List typical abiotic and biotic characteristics of different biomes.  
Section: 16.05*

*Topic: Community Ecology*

# 16 Summary

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