

NAME \_\_\_\_\_

## SOL 4.5 REVIEW - Revised

### Habitats, Niches and Adaptations

**POPULATION** – A group of the same species living in the same place at the same time.

**COMMUNITY**-- All of the populations that live in the same area



- The animals above are part of a :
  - grassland population
  - \*grassland community
- A community is:
  - \*all of the animals living in an area.
  - all of the animals of one species in an area.
- A population is:
  - all of the animals in a particular area.
  - \*all of ONE KIND of animal in an area.
- An example of a population is:
  - all the animals in a barnyard
  - \*all the rabbits living in a meadow
  - all the alligators in the world
  - a squirrel family in its nest
- Which sentence is the best description of a community?
  - A community provides shelter for one type of organism
  - \*A community is made up of all types of organisms in an area
  - A community is made up of one type of organism
  - A community provides food for only one type of organism

- Which of the following is not a basic need off all animals
  - food
  - \*friends
  - water
  - protection from predators
- An animal's habitat is:
  - its living surroundings
  - its non-living surroundings
  - \*both living and non-living surroundings.
- What can cause change in a habitat?
  - Weather
  - Fires
  - Pollution
  - \*any of these
- When an animal's habitat changes, the animal can:
  - migrate
  - sleep
  - adapt
  - \*a & c
- What happens to animals or plants which cannot adapt to changes in their habitats.
  - \*they die
  - they drink water
- A \_\_\_\_\_ is an animal's surroundings, which it depends of for its needs.
  - \*habitat
  - village
  - community
  - population

## ADAPTATIONS

Almost every part of an animal can be considered an adaptation. Adaptations allow animals to survive in their environment. There are two kinds of adaptations. **STRUCTURAL ADAPTATIONS** are body parts or body features, i.e. a pointed bill or feathers. **BEHAVIORAL ADAPTATIONS** have to do with, you guessed it, behavior. Behavioral adaptations are the things animals do to help them survive and compete in their environment. Some of these behaviors may be **INSTINCT**, and some may be **LEARNED**.

12. An animal's \_\_\_\_ allow it to survive in its environment.
- community
  - \*adaptations
  - friends



13. What is this adaptation called?
- \*camouflage
  - mimicry

Circle : Behavioral or \*Structural adaptation



14. The adaptation shown above helps birds and many other animals survive winter. It is called migration

Circle: \* Behavioral or Structural

15. When an animal looks like another animal to trick its enemies, this is called:

- hibernation
- \*mimicry
- migration



16. It would be easy to mistake this butterfly's wing for a more threatening animal. This is an example of:

- camouflage
- \*mimicry

Circle: Behavioral or \*Structural

17. The viceroy butterfly looks like the nasty-tasting monarch butterfly, so some of its enemies don't eat it. This is an example of:

- camouflage
- \*mimicry

Circle: Behavioral or \*Structural

18. The strong scent of the skunk serves what basic need?

- \*defense
- camouflage
- shelter

Circle: \* Behavioral or Structural adaptation

19. Why do birds have differing bills?

- So they look better
- \*Their bills are adaptations that make them better suited to the food in their environment.

20. When winter arrives, some animals enter a deep sleep called:

- migration
- \*hibernation
- estivation

Circle: Structural or \*Behavioral adaptation?



21. Building a web is:

- a learned behavior
- \*an instinct

Circle: Structural or \*Behavioral adaptation?

22. Which is an example of a learned behavior?

- bees looking for flowers
- ducks migrating in the spring and fall
- a fish swimming
- \*a dog sitting on command

23. If disease kills all the rabbits in an environment, foxes may choose a different food source. This is an example of:

- \*a behavioral adaptation
- a life cycle
- a structural adaptation



## FOOD CHAINS

**consumers**

**herbivores**

**decomposer**

**sunlight**

**second**

**carnivores**

**producers**

**bacteria**

**energy**

**photosynthesis**

**omnivores**

24. The mouse above is the prey and the owl is the: (write the answer)

predator

25. The color of a fish, its shape, its size, the structure of its gills and the way it acts, are all examples of the fish's:

- niche
- instincts
- behaviors
- \*adaptations

**Each organism has a specific role in its community. This role is the organism's NICHE. An animal's niche may change many times as it grows.**

26. The easiest way to understand an animal's niche, is to consider:

- \*what it eats, and what eats it.
- what it looks like
- where it lives

27. This picture tells us something about the beaver's:

- \*niche
- population



28. An animal's niche can be thought of as its place in the food chain. Does an animal's niche stay the same throughout its life?

- yes
- \*no

Animals eat plants or other organisms for

energy. Plants use

sunlight to make their own food through a process called **photosynthesis**.

This is why plants are called producers.

Plants store energy they don't need in roots, stems, and leaves. This energy is passed on to animals that eat plants. Animals that eat plants are called herbivores. Plants are first in any food chain, and herbivores or omnivores, which eat both meat and plants are second. Can a carnivore follow a plant in a food chain? Yes/No

Next in the food chain comes the animal that eats the herbivore. This is the carnivore.

Herbivores and carnivores are consumers, not producers, because they consume other organisms for food. They do not make their own food using sunlight.

A food chain can be short or long, but it ends with a decomposer. Mushrooms and bacteria are examples of decomposers. Decomposers break down dead organisms into nutrients needed by the plants at the beginning of the food chain.



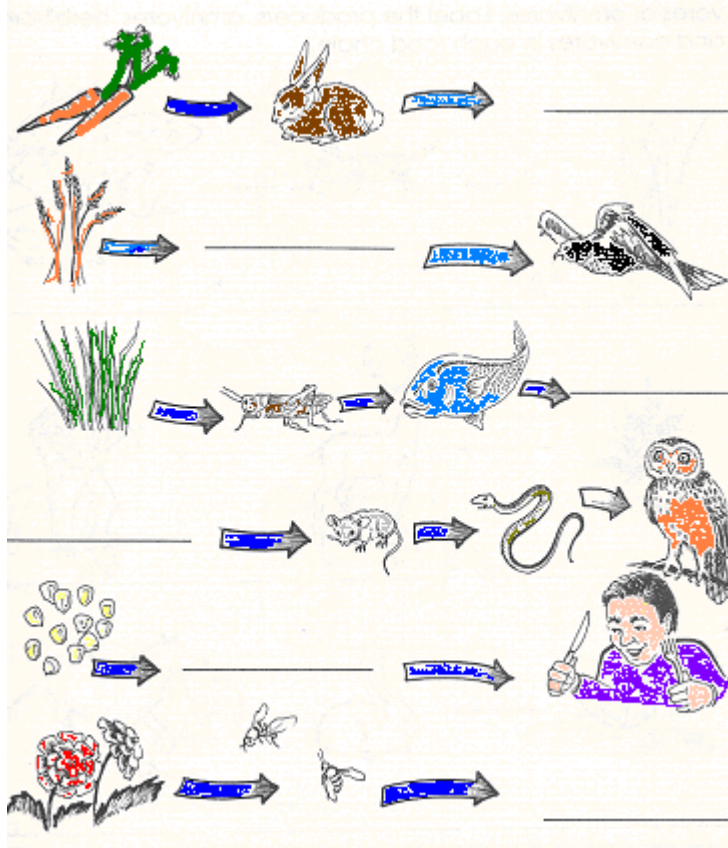
29. Is this food chain in the right order?

- a. \*yes
- b. no

30. Which is the herbivore?

- a. the bird
- b. the snail
- c. \*the flower

Fill in the missing link in these food chains with one of the following, or an organism of your choice.  
bear, skunk, eagle, mouse, cow, grass



31. What is first in every food chain?

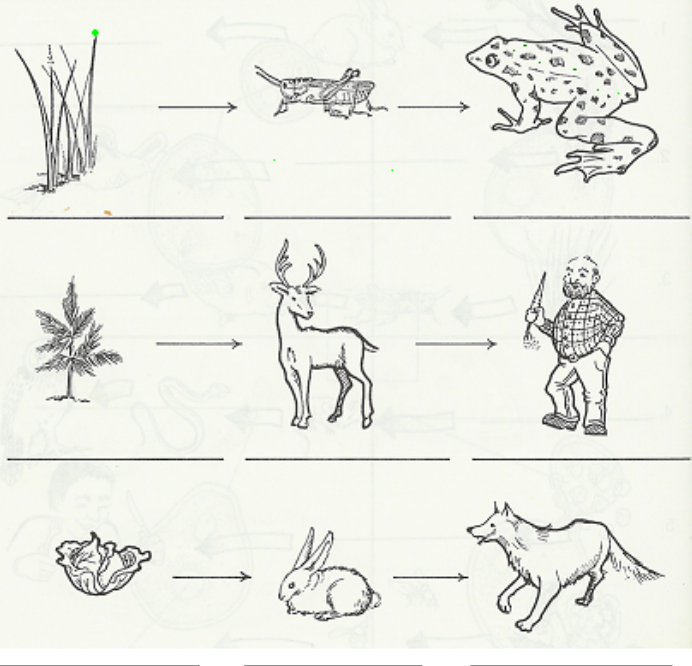
- a. \* a producer
- b. a consumer
- c. a herbivore
- d. a carnivore

32. At the very end of the food chain is the:

- a. carnivores
- b. producers
- c. \*decomposer

Label each part of the food chain producer, herbivore, carnivore or omnivore

Organisms are either producers or consumers, depending upon the source of their energy. Consumers are either herbivores, carnivores or omnivores. Label the producers, omnivores, herbivores and carnivores in each food chain.



33. These mushrooms are:

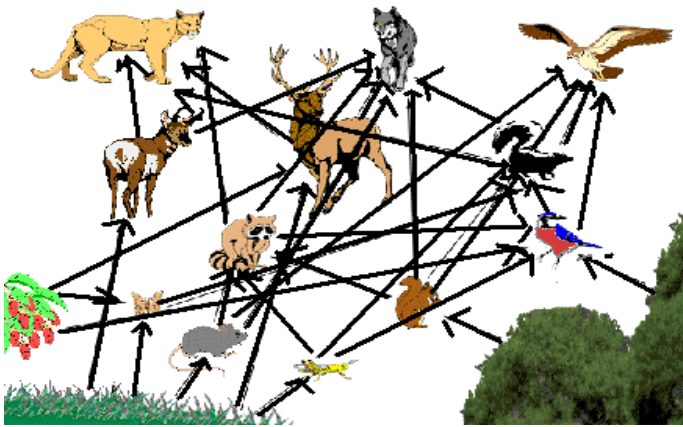
- a. plants (producers)
- b. consumers
- c. \* decomposers

34. When plants and animals die, \_\_\_\_\_ break down the living matter so it can be used again in other ways.

- a. \*decomposers
- b. carnivores
- c. spiders

35. Some examples of decomposers are:

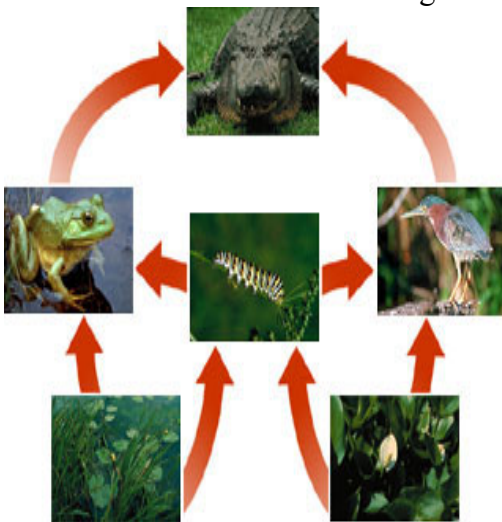
- a. mushrooms
- b. fungus
- c. bacteria
- d. \*all of the above



36. This is a:  
 a. food chain  
 b. \*food web  
 c. web of food

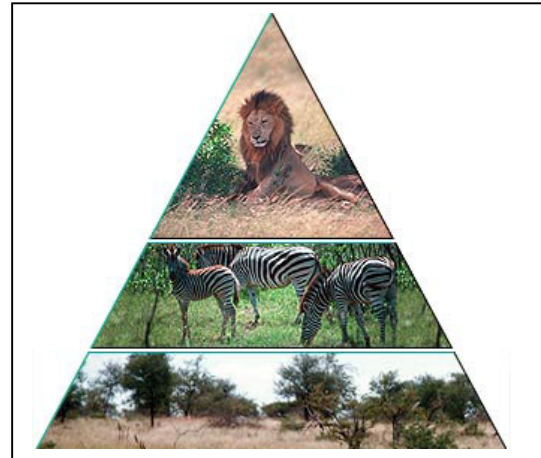
37. A producer that's part of this food web is:  
 a. the mouse  
 b. \*the grass  
 c. the skunk

38. One of the many food chains that make up the web is:  
 a. squirrel—raccoon--oak tree-- mountain lion  
 b. \*oak tree—squirrel—raccoon-- mountain lion  
 c. wolf—raccoon—mouse-- grass



39. What effect might a disease among the alligator population have?  
 a. The number of frogs would decrease  
 b. The number of caterpillars might increase  
 c. no effect  
 d. \*The number of frogs might grow until there weren't enough caterpillars for them to live on.

40. If the caterpillars all died from chemical pollution, what effect would this have on the food web?  
 a. the number of frogs would increase  
 b. the number of alligators would increase  
 c. \*the number of frogs and alligators might decrease unless the frogs found something else to eat.



41. The picture above is called:  
 a. a food web  
 b. \*an energy pyramid

42. What is at the base of the pyramid?  
 a. \*Producers (plants) are at the bottom because they use the sun's energy to make their own food.  
 b. Carnivores are at the base because they are bigger and stronger.

43. At the top of the pyramid are:  
 a. \*carnivores  
 b. herbivores  
 c. all consumers

44. What would happen if, on an island, a disease killed most of the plants?  
 a. Animals would adapt and eat meat  
 b. Nothing would happen  
 c. \*Soon there would be no life on the island. Herbivores would starve first; carnivores would follow.

45. If one link in a food chain disappears, -  
 a. other organisms are not affected.  
 b. \*all of the other organisms are affected.