Food Chains & Webs Review - A
7th Grade Environmental Science
Mrs. Krempa

Name _____

Date & Section _____

Answer the following questions without looking at your notes! You must go through ALL of the questions at least once! Circle the number to the questions you don't know or are unsure of, *then* look up the correct answer in your notes. All of this information is fair game for your test!

1. Name & briefly describe the three basic energy roles in an ecosystem. For each role, give an example of an organism that plays that role.

   a. ***Producer - organism that makes its own food by photosynthesis***

      Example ____***grass, flower, tree***_____

   b. ***Consumer – organism that eats other organisms. Can NOT make their own food.***

      Example ___***lion, human, dog***_____

   c. ***Decomposer – chemically breaks down dead organisms and returns nutrients to soil.***

      Example ____***mushroom, bacteria, maggot***_____

2. An organism that gets energy and nutrients by breaking down the remains of other organisms.

   _____***decomposer***_____

3. A consumer that feeds on dead organisms. ____***scavenger***_____

4. The path of energy transfer from producers to consumers. ____ ***food chain*** _____

5. The arrows in a food chain point to? (there are two answers!)

   a. _____***to who is doing the eating***_____

   b. _____***the direction that energy flows***_____

6. Forms the base of a food chain. _____***producer***_____

7. The feeding relationships among organisms in an ecosystem. _____***food web***_____

8. The primary source of energy for most ecosystems. _____***sun***_____

9. A _____***food web***_____ contains many food chains.

10. Which is better, a food chain or a diverse food web? Why?

    Diverse web is better – there are more choices / options, so if one food source (resource) is gone, there are still others to choose from.

11. Why are decomposers important? Where would you place them on a food chain? Why?

    Decomposers return the nutrients in dead organisms back to the soil.

    Bottom of food chain – nutrients make producers grow, without nutrients – no producers ***<u>OR</u>***

    Top of food chain – decomposers break down ALL living things on the food chain after they are dead

12. What is the synonym for producer? _____***autotroph***_____

13. What is the synonym for consumer? _____***heterotroph***_____

14. Define producer. List two examples.

Definition ___ ***organism that makes its own food by photosynthesis***

Example ____***grass, tree***_____ Example ____ ***flower***_____

15. Define primary consumer. List two examples.

Definition _____***consumer that directly eats a producer. Herbivore***. _____

Example _____ ***moo cow***_____ Example _____ ***rabbit***_____

16. Define secondary consumer. List two examples.

Definition _____ ***consumer that eats a primary consumer. Omnivore or carnivore.***_____

Example _____***frog, shrew, mouse***_____ Example _____***lizard, snake***_____

17. Define tertiary consumer. List two examples.

Definition _____ ***consumer that eats a primary or secondary consumer. Omnivore or carnivore.***

Example ____***Lion***_____ Example _____***Hawk***_____

18. What is the name of the process plants use to make their own food? ____**Photosynthesis**_____

19. List two examples of the following consumers…

herbivore _____***moo cow***_____ Carnivore _____***lions, tigers,*** _____

_____***deer***_____ _____ ***sharks, Eagles*** _____

Omnivore ***human bear, shrew, mouse*** scavenger _____ ***hyena, vulture***_____

Coyote, goat, Robin, Blue Jay ____ ***raccoon, crow, fox*** _____

Chicken

20. Circle the answer of the term includes the living and non-living parts.
A. Ecosystem B. Niche C. Community

21. Circle the answer of the term includes only the living parts.
A. Ecosystem B. Niche ***C. Community***

22. Circle the answer of the term that describes the "job" of an organism, what an organism does in its habitat.
A. Ecosystem ***B. Niche*** C. Community

23. On another sheet of paper, draw an energy pyramid. Include numbers (calorie or percent), an organism at each level and label each level as producer, primary consumer, secondary consumer or tertiary consumer.

*KEEP GOING! There's a food web to look at!!

24. Use the food web below to answer the following questions.

a. List two primary consumers from this web. ***Caterpillar, Rabbit, Squirrel, Mouse***

b. List two secondary consumers from this web. ***Thrush, Hawk, Fox, Weasel***

c. List two tertiary consumers from this web. ***Hawk, Fox***

d. List one organism that could be placed at more than one level in this food web. Identify what levels they could be on.

Organism: ***Hawk*** Levels: ***secondary when it eats Rabbit, tertiary when it eats Thrush that eats caterpillar then grass***

Organism: ***Fox*** Levels: ***secondary when it eats Rabbit, tertiary when it eats mouse that eats caterpillar then grass***

There are other examples… !

25. Draw two chains from the web above. Label each organism as producer, primary consumer, secondary consumer or tertiary consumer.

1. Grass → Rabbit → Fox

2. Grass → Caterpillar → Thrush → Hawk

#23.

2 cal.
Tertiary consumer
0.1%
Owl
20 cal.
Secondary consumer
1%
Shrew
200 cal.
Primary Consumer
10%
Grasshopper
2000 calories
Producer
100% Energy
Grass