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# FOOD CHAINS AND WEBS Video Quiz



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## FOOD CHAINS AND WEBS Chaining It Together

1. Using your knowledge of food chains and the following organisms, in the space below, create a diagram of a food chain containing the organisms listed below. Use arrows to show that organisms are eaten by other organisms further along the chain. Also,make a box above each organism, and using color pencils create a drawing of the organism. Leave plenty of room to add other things requested further down the page.

> Phytoplankton Nymph Trout Heron

After creating your basic food chain, label each organism either a producer or consumer.
Last, label each step along the food chain with the following labels: first tropic level, second trophic level, third trophic level, and fourth trophic level.

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## FOOD CHAINS AND WEBS Web Weaving

1. In the space below, using your knowledge of food webs and the organisms listed below, create a food web. Use arrows to show that organisms are eaten by other organisms further along the chain. Also make a box above each organism, and using color pencils create a drawing of the organism. Leave plenty of room to add other things requested further down the page.

| Phytoplankton | Trout |
|---------------|-------|
| Berries       | Heron |
| Squirrel      | Snake |
| Nymph         | Bird  |
| Bear          |       |

2. Add decomposers to your food web and include arrows where appropriate.

3. Describe how this food web may be similar or very different from food webs in your region.

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## FOOD CHAINS AND WEBS Word Search

Directions: Find the hidden vocabulary words listed below. Words may appear vertically, horizontally, or diagonally.

| Food c | hain | l |   | Ecosystem Riparian |      |     |   |   |      | Producer |     |     |       |          |   | Consumer |     |     |   |   |               |   |      |              |
|--------|------|---|---|--------------------|------|-----|---|---|------|----------|-----|-----|-------|----------|---|----------|-----|-----|---|---|---------------|---|------|--------------|
| Herbiv | ore  |   |   | С                  | arni | vor | e |   | Prey |          |     |     |       | Predator |   |          |     |     |   |   | Trophic level |   |      |              |
| Omniv  | ore  |   |   | F                  | boc  | weł | 5 |   |      | D        | eco | mpo | osers | 5        |   | В        | iom | ass |   |   |               | B | ioma | agnification |
|        |      |   |   |                    |      |     |   |   |      |          |     |     |       |          |   |          |     |     |   |   |               |   |      |              |
| А      | F    | В | G | В                  | Ι    | 0   | Μ | А | G    | N        | Ι   | F   | Ι     | С        | А | Т        | Ι   | 0   | N | С | Н             | D | Ι    | L            |
| J      | V    | K | W | L                  | Х    | Μ   | Y | N | Ζ    | 0        | A   | Р   | В     | Q        | С | R        | D   | S   | E | Т | F             | U | G    | Т            |
| Н      | 0    | Ι | F | 0                  | 0    | D   | С | Η | А    | Ι        | N   | S   | J     | Р        | K | Q        | С   | L   | R | Μ | S             | N | Т    | R            |
| U      | G    | V | Η | W                  | Ι    | Х   | J | Y | K    | Ζ        | L   | А   | М     | В        | N | С        | А   | 0   | D | Р | E             | Q | F    | 0            |
| D      | R    | S | R | Y                  | E    | Т   | Ζ | U | Η    | Η        | Е   | R   | В     | Ι        | V | 0        | R   | E   | А | R | W             | В | Х    | Р            |
| E      | С    | Μ | Ι | D                  | N    | С   | Е | 0 | F    | Р        | G   | Q   | Η     | R        | Ι | S        | N   | J   | Т | K | U             | L | V    | Н            |
| C      | W    | D | Р | Х                  | Р    | R   | 0 | D | U    | С        | Е   | R   | E     | Y        | F | Ζ        | Ι   | G   | А | Η | В             | Ι | С    | Ι            |
| 0      | J    | S | А | K                  | Т    | L   | U | S | Μ    | V        | Ν   | W   | 0     | Х        | Р | Y        | V   | Ζ   | R | Е | Ι             | R | А    | С            |
| Μ      | В    | L | R | С                  | Μ    | D   | N | E | Y    | 0        | F   | D   | G     | Q        | Η | R        | 0   | Ι   | S | J | 0             | Т | K    | L            |
| Р      | U    | D | Ι | V                  | E    | W   | F | Х | G    | S        | Y   | Η   | Ζ     | Ι        | А | J        | R   | В   | K | Т | Μ             | С | L    | E            |
| 0      | М    | V | А | N                  | W    | 0   | Х | В | D    | Y        | Т   | Q   | U     | Ζ        | А | E        | E   | Т   | А | В | Ν             | U | Α    | V            |
| S      | С    | 0 | N | S                  | U    | Μ   | E | R | V    | С        | W   | E   | D     | Х        | E | Y        | F   | D   | А | G | Ι             | В | В    | Е            |
| Ε      | С    | L | D | Μ                  | E    | W   | N | F | 0    | G        | Η   | Q   | М     | Ι        | R | J        | E   | S   | K | Т | V             | Т | U    | L            |
| R      | Η    | R | Ι | S                  | D    | J   | Т | K | U    | V        | L   | W   | М     | Х        | N | R        | Y   | 0   | Ζ | Р | 0             | А | Q    | В            |
| S      | С    | L | D | 0                  | Μ    | E   | N | F | Р    | R        | E   | Y   | G     | 0        | Р | Η        | Р   | Ι   | Q | J | R             | D | Κ    | Y            |
| Т      | F    | U | 0 | V                  | G    | W   | Ι | Х | Η    | Y        | Ι   | Ζ   | J     | A        | K | В        | L   | С   | Μ | D | E             | E | 0    | Х            |
| Р      | 0    | F | Q | Y                  | R    | Ζ   | S | А | В    | Ι        | 0   | Μ   | А     | S        | S | Т        | В   | U   | С | V | D             | D | W    | Е            |



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# FOOD CHAINS AND WEBS Vocabulary Words and Definitions

#### Directions: In the spaces provided, write definitions of the following vocabulary words.

- 1. Food chain-
- 2. Ecosystem-
- 3. Riparian-
- 4. Producer-
- 5. Consumer-
- 6. Herbivore-
- 7. Carnivore-
- 8. Prey-
- 9. Predator-
- 10. Trophic level-
- 11. Omnivore-
- 12. Food web-
- 13. Decomposers-
- 14. Biomass-
- 15. Biomagnification-

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### FOOD CHAINS AND WEBS Field Form For Food Webs

Directions: Use the following form to list the organisms in the vicinity of your school or your home. List the organisms you observe, and decide if they are consumers or producers. Also list how the organisms get their energy, and what organisms (if any) eat them. Once you have filled in the chart, then create a food web based on the data you have gathered.

| Organism | Consumer or Producer | Derives Energy From | Serves as Food For |
|----------|----------------------|---------------------|--------------------|
|          |                      |                     |                    |
|          |                      |                     |                    |
|          |                      |                     |                    |
|          |                      |                     |                    |
|          |                      |                     |                    |
|          |                      |                     |                    |
|          |                      |                     |                    |

Food Web Diagram:

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## FOOD CHAINS AND WEBS The Big Picture

Directions: The following complex diagram summarizes many important concepts relating to food webs, cycling of matter, and flow of energy in ecosystems. Take a few minutes to study the diagram, then answer the following questions.



1. What animal(s) on the food web above are on the highest trophic level? What trophic level is it?

2. Define in your own words the term biomagnification. Suppose that in the food web above, phytoplankton absorbed harmful chemicals in the water. Describe how these chemicals could end up in the body of a bear.

3. Describe the role of decomposers in the food web. Describe where the matter they break down goes.

4. Study the pyramid on the right. Describe what happens to the amount of energy as you go up the pyramid. Notice that the pyramid is placed adjacent to the food web. Describe the energy value of the animals at different points in the food web in terms of the energy pyramid.

5. Describe how a biomass pyramid would be positioned on the diagram. What would be the relative amount of the biomass of the organisms on the food web compared to other organisms?

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#### FOOD CHAINS AND WEBS Name That Critter

Directions: The following clues describe organisms that live in and around a pond ecosystem. Write the name of the animal and decide if it is a producer or consumer. If it is consumer, state if it is a herbivore, carnivore, or omnivore. Use these organisms to create a food web diagram on the back of this sheet.

| CLUE   | ORGANISM | PRODUCER OR<br>CONSUMER | HERBIVORE,<br>CARNIVORE,<br>OR OMNIVORE |
|--|----------|-------------------------|---|
| This organism has powerful teeth<br>and strong jaws to cut down large<br>trees. Eats bark and plants.  |          |                         |   |
| This organism looks and even<br>sounds something like a wolf, but is<br>much more common. It visits<br>the pond to look for most anything<br>to eat. |          |                         |   |
| This organism grows on a prickly vine, and is used to make jam.  |          |                         |   |
| This mammal is tough when<br>cornered, has two black eyes and<br>feeds on nearly everything it can<br>catch in the pond.                             |          |                         |   |
| This organism has many fins, feeding on insects and plants.  |          |                         |   |
| This organism lives in the water,<br>has powerful claws, has a hard<br>outer shell, and eats both plants<br>and animals.                             |          |                         |   |
| This organism flies in the air, has<br>beautiful wings, and eats<br>mostly plants.   |          |                         |   |
| This amphibian lives mostly in the water, is a great jumper, and catches insects for its food.   |          |                         |   |
| This organism lives in the water,<br>produces its own food from the sun,<br>and is often mistaken for seaweed.                                       |          |                         |   |

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