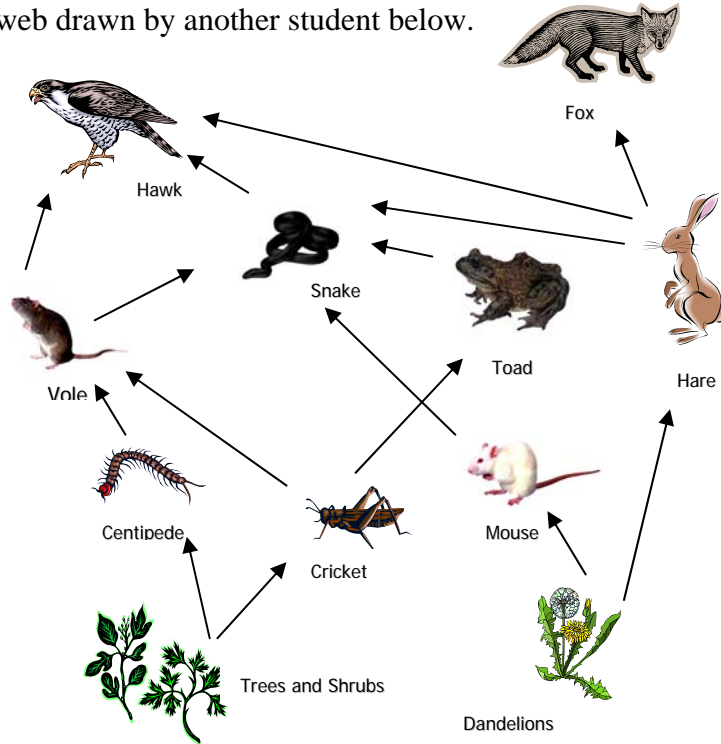




Ecosystems Assessment

Name _____ Date _____

Study the food web drawn by another student below.



What does this food web diagram do well? List as many things as you can think of:

What would you change to improve this food web diagram? List as many things as you can think of?

2. Here is what two students said. Which do you agree with **most**? “Energy moves through a food web in a pattern like...
- a. a set of dominoes where the energy goes from the sun, to the green plants, then to the animals, and eventually is lost as heat energy.”
 - b. a cycle where the energy goes from the sun to green plants, then to animals, and then goes into the soil and back into the green plants and to animals, and so on.”

3. Six students told what happens to a tree in the forest **many years** after it dies. Which do you agree with **most**?
- a. “Nothing would happen because the tree is dead.”
 - b. “The tree becomes soil.”
 - c. “An animal might move it.”
 - d. “It turns brown and the branches fall off.”
 - e. “The pieces of the tree disappear.”
 - f. “It turns into small pieces that fall into the soil.”

4. Think about your answer for question 3. Why does it happen? Circle the **best answers**. (You can circle one or more answers.):
- a. The tree falls apart on its own.
 - b. It gets eaten by worms and insects.
 - c. It might fall over but nothing happens, the tree is just there.
 - d. The tree is eaten by tiny bacteria that are too small to see.
 - e. Rotting makes the pieces of the tree disappear.
 - f. Animals or people take it.

5. What if nothing ever happened to trees in the forest after they died? Which student do you think gave the **best** answer?

- a. Student 1- "There would be a lot of dead trees and leaves everywhere."
- b. Student 2- "It wouldn't really make a difference."
- c. Student 3- "There would be less matter for new life."
- d. Student 4- "Worms would have less to eat."

6. If all of the green plants in an ecosystem died, what would happen in the years that followed? Which answer do you **agree with most**?

- a. The things that eat the green plants would have no food, but the things that don't eat green plants would have food.
- b. None of the animals in the food web would have food.
- c. Decomposers would not be affected.
- d. The animals would be okay because the energy in the food web would be recycled and used again.

7. Which student do you agree with **most**?

- a. Student 1- Mice are important to owls because they are food for them. Owls aren't important to mice.
- b. Student 2- The owls get food from mice and the mouse population stays in balance.
- c. Student 3- Owls get food from mice, but the mouse dies. Mice help owls but owls kill mice.
- d. Student 4- Owls are important to mice but mice are not important to owls. If there are too many mice, there won't be enough food for them, so the owls keep the numbers of mice to a good size.

8. Which answers do you agree with? Circle the **best answers**. (You can circle one or more answers.):

- a. "It is good for ecosystems to always be in balance. Animals can die if there is flux.
- b. "Balance and flux both have important roles in ecosystems."
- c. "Ecosystems try to be in balance. It is the goal of the ecosystem."
- d. "Flux is a part of balance, so there are always both in the ecosystem."
- e. "Flux creates opportunities for different organisms in the ecosystem."
- f. "A lot of flux can make an ecosystem unstable."
