

4.2 Homework "What Shapes an Ecosystem?"

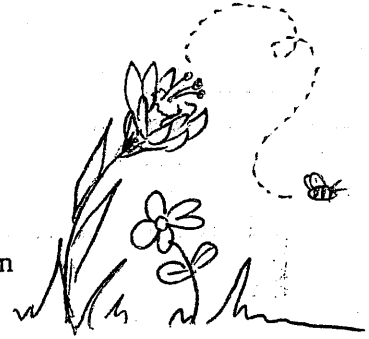
Directions: Read chapter 4, section 2 and THEN answer the questions below.

1. What is a niche?
2. How is the bullfrog's niche different than its habitat?
3. Can 2 species share the same niche? _____ Explain below.
4. _____ is when different organisms attempt to use the same ecological resources (space, food water, etc.)
5. The _____ states that no 2 species can occupy the same niche in the same habitat at the same time.
6. If a wolf eats a cat, the wolf is the _____ (predator/prey) and the cat is the _____ (predator/prey).
7. Symbiosis is when _____
8. What is the difference between predation and parasitism?
9. What is ecological succession?
10. Ecological change that happens where no soil exists is called: _____
11. What kind of event precedes primary succession?
12. After primary succession, the first species begin to populate an area and are called: _____
13. When does secondary succession occur?
14. A _____ community is a stage of succession that occurs when a mature, stable community is established in an ecosystem.

Symbiosis: Understanding the Main Idea

Each of the following situations describes a form of symbiosis. After each situation, write the type of symbiosis that is being described. Then explain why this form of symbiosis applies to this situation.

parasitism commensalism mutualism



Situation 1: A flowering plant cannot pollinate another plant unless pollen is transported between the plants. While gathering nectar from the plant's flowers, a bee is lightly dusted with pollen.

The bee then transports the pollen as it moves from one flower to another. This enables the flowering plant to reproduce.

Situation 2: A liver fluke enters the human digestive system on a piece of beef. The fluke derives nourishment from the human; the human is seriously weakened by the presence of the fluke.

Situation 3: A fungus that cannot make its own food absorbs sugars and other nutrients from plant roots; the fungus also absorbs from the soil certain minerals that can be used by the plant and which the plant has difficulty obtaining by itself.

Situation 4: Tall trees provide birds with a place to nest that offers them protection against many kinds of predators.

Situation 5: A blind human is able to move about safely with the help of a guide dog. The human provides the dog with food, shelter, and medical care.
