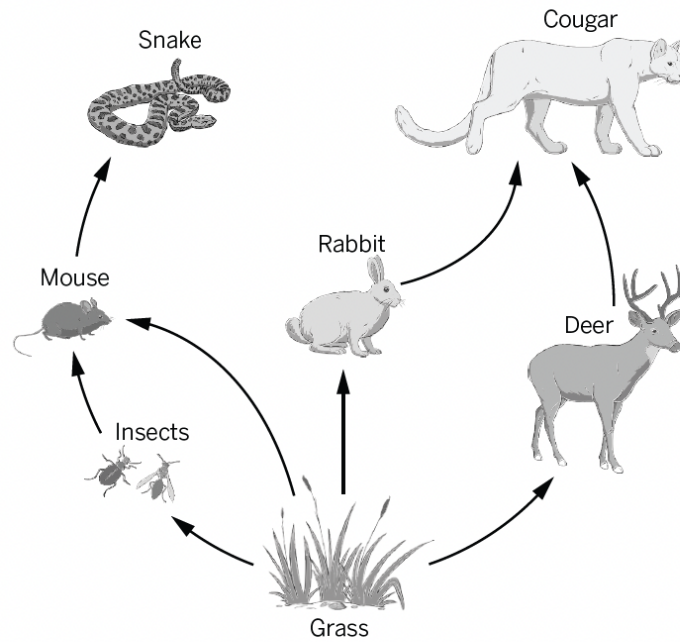


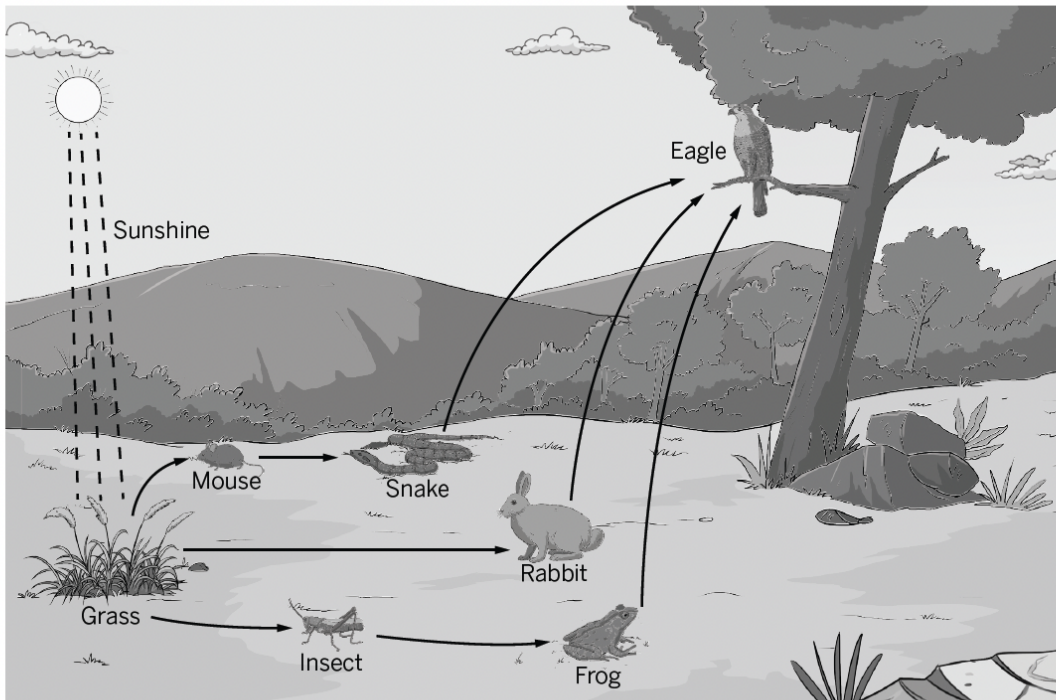
Use the diagram to answer the question.



An area has a large decrease in the deer population. How might this impact the ecosystem?

- a. The rabbit population could increase because the cougars now only eat rabbits.
- b. The population of mice could decrease, causing the snake population to decrease.
- c. There could be less food for cougars to eat, which would cause a decrease in their population.
- d. There could be an increase in both the cougar and snake populations because more grass will be available.

The figure below shows an ecosystem with different plants and animals.



What statement can you make about the flow of energy in this ecosystem?

- a. On a cloudy day, no energy will flow in this ecosystem.
- b. Grass can use and store energy from the sun, which eventually flows to all of the other life-forms.
- c. Eagles eat snakes, rabbits, and frogs and are not affected by the energy in other parts of the ecosystem.
- d. If eagles are removed from the ecosystem, energy can no longer flow to any of the other animals.

White polar bears only eat fish and other types of meat. What is the source of their energy?

- a. Polar bears are white, which makes them able to use and store energy directly from the sun.
- b. The fish and meat that polar bears eat bring and store energy from warmer locations.
- c. Fish make their own energy and pass it on to polar bears and the other life-forms that eat fish.
- d. Ocean plants use and store energy from the sun and pass it on to the fish and other animals that the polar bears then eat.



Sonya builds a terrarium with different kinds of plants inside. She adds some crickets to the terrarium, too. Sonya wants to show how matter cycles within the terrarium. Which of the following actions could she take to show this? Select all that apply.

- a. Sonya could add worms and fungi to the terrarium. If a plant in the terrarium dies, these decomposers can recycle some materials back into the soil for the other plants to use.
- b. Sonya could remove all of the larger plants in the terrarium. She could plant them in a larger pot so that all the plants have enough space to grow.
- c. Sonya could add a lizard to the terrarium. The lizard may eat the crickets and leave droppings on the ground that will be absorbed back into the soil.
- d. Sonya could add plant food to the terrarium. The plant food will provide nutrients to the soil to help the plants grow taller faster.