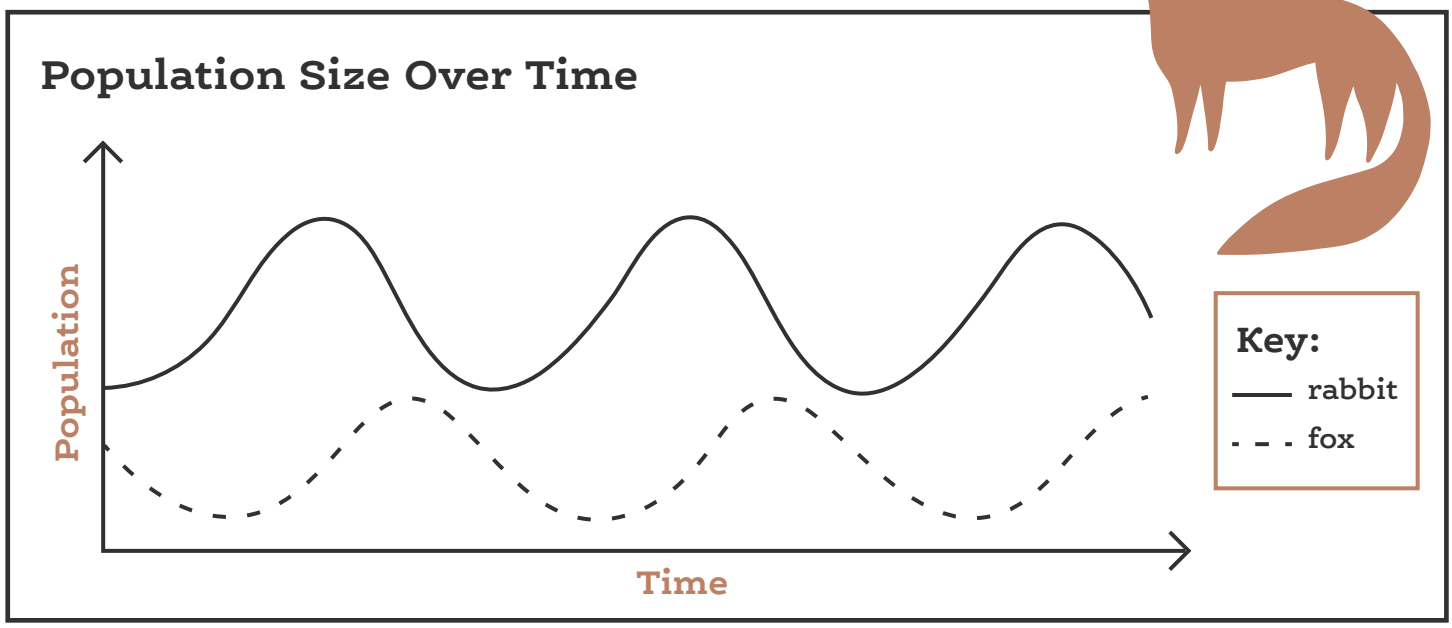
Name _____ Date _____ Answer Key

Population Growth Factors

The graph below shows trends in the fox population and rabbit population in a forest ecosystem over 10 years.



Analyze the graph and answer the questions below. Sample answers

1. Which animal is the predator, and which is the prey?
   The fox is the predator, and the rabbit is the prey.

2. When the fox population was at a peak, was the rabbit population increasing or decreasing? Why?
   When the fox population was at a peak, the rabbit population was decreasing because there were more predators in the ecosystem hunting the rabbits.

3. When the rabbit population was at a peak, was the fox population increasing or decreasing? Why?
   When the rabbit population was at a peak, the fox population was increasing because the foxes had a large supply of food.

4. Notice that the fox population was always smaller than the rabbit population. Why do you think that happened?
   One fox can consume multiple rabbits.

5. If there were no foxes in the ecosystem, could the rabbit population grow indefinitely? Why or why not?
   The rabbit population could not grow indefinitely because it would eventually run out of resources, like water and food.

6. What do you think would happen to the populations of both organisms if their ecosystem was affected by a drought? Why?
   Because both populations need water to survive, I think both populations would decrease in a drought.