Lab 10. Predator-Prey Relationships: How Is the Size of a Predator Population Related to the Size of a Prey Population?

1. In some ecosystems there may be multiple predators. Using what you know about predator-prey relationships, describe how it is possible for multiple predators to exist in the same habitat.

2. In an ecosystem, the size of the predator population is related to the size of the prey population. Describe what would happen if the predator population reproduced faster than the prey population.

3. Scientific knowledge changes so quickly that it should be considered unstable.

    a. I agree with this statement.
    b. I disagree with this statement.

    Explain your answer, using an example from your investigation about predator--prey relationships.

4. It is important for scientists to use a variety of methods to learn about the natural world.

    a. I agree with this statement.
    b. I disagree with this statement.

    Explain your answer, using an example from your investigation about predator--prey relationships.

5. Scientists often study potential cause-and-effect relationships when they investigate the natural world. Explain why it is important to understand causes and effects, using an example from your investigation about predator-prey relationships.

6. Scientists develop models to help them understand the natural world. Sometimes the models scientists develop are similar to the computer model that you used in the predator-prey investigation. Explain why models are helpful, using an example from your investigation about predator-prey relationships.