

High School Science Virtual Learning

Biology

Predator and Prey Relationships April 23, 2020



High School Applied Biological Science

Lesson: Predator-Prey Relationships

Objective/Learning Target: Students will understand how predator-prey relationships function.





Bell Ringer Activity

Take a look at this image.

 1) Who is the predator?
2) Who is the prey?
3) What do you think would happen to the population of this fish if the bears were no longer feeding out of these waters?



Bell Ringer Answers

- 1) The predator is the bear.
- 2) The prey is the fish.

3) The population of this fish would most likely increase if the bears were no longer feeding out of these waters.

Predators control prey populations and do so directly by reducing the size of those populations by the number of prey individuals they consume.



Let's Get Started!

Lesson Activity:

Directions:

Please watch the video linked below and answer the following questions:

- 1. If the prey population is high and the predator population is relatively low what will happen the the predator population?
- 2. What will happen to the prey population when the predator population is high?
- 3. What organisms were involved in the real life example he gave about predator-prey relationships?



Lesson Questions Answers

- 1. The predator population will increase.
- 2. The prey population will decrease.
- 3. The example he gave in the video was between a hare and a lynx.





Practice Questions

Watch this video and answer the following questions.



- 1. How would you describe the relationship between the eagle and the hare?
- 2. Are there any patterns in their interactions with one another?
- 3. According to video why can't the eagle afford any mistakes?
- 4. How could an overpopulation of eagles affect the hare population?
- 5. What about an underpopulation?



Practice Questions Answers

Once you have completed the practice questions check with the answer key.

- 1. The eagle is the predator and the hare is the prey.
- 2. The pattern of their relationship is that the prey will either hide or run. The predator will continue to attack until it becomes too high of a risk.
- 3. Dangerous wind could cause injury to the eagle.
- 4. An overpopulation of eagles would decrease the population of hares.
- 5. With an under-population of eagles you'd see an increase in the population of hares.



Common Misconceptions

"Predator and prey populations are similar in size." Prey populations tend to be larger than predator populations. "The relative sizes of predator and prey populations have no bearing on the size of the other." The sizes of predator and prey populations influence each other.





Additional Online Practice:

Click on the links below for additional practice.

Predation

Quizizz Predator & Prey



Additional Resources

<u>10 Dumbfounding Examples of</u> <u>Predator-Prey Relationships</u>

Predator-Prey Relationship

Trophic Links: Predation and Parasitism

