



Science Virtual Learning

LEP Science

Symbiotic Relationships

May 6, 2020



LEP Science
Lesson: May 6, 2020

Objective/Learning Target: I can distinguish between the different relationships organisms share.



Let's get started

Watch the short video and as you watch, write the definitions of these terms and give an example

Symbiosis

Mutualism

Commensalism

Parasitism

[Symbiotic Relationships](#)



How did you do?

Symbiosis - a relationship between two species in close proximity

Mutualism - a relationship in which both species benefit.

Example: Bees and flowers (bees eat the flowers nectar for food, in turn, the flowers are pollinated by the bees)

Commensalism - a relationship in which one species benefits and the other is neither harmed nor helped. **Example:** remora fish and the shark

Parasitism - a relationship in which one species benefits and the other is harmed. **Example:** humans and mosquitos

Practice Questions

1. What is symbiosis?
2. What are the 3 main types of symbiotic relationships?
3. Fill in the chart below indicating for each type of symbiotic relationship if the species is benefited, harmed, or not affected.

| Type of Relationship | Not Affected | Benefited | Harmed |
|----------------------|--------------|-----------|--------|
| Mutualism | | | |
| Parasitism | | | |
| Commensalism | | | |

Answer Key

Once you have completed the practice questions check with the work.

1. Symbiosis is a close relationship between two organisms where at least one benefits.
2. Commensalism, mutualism, and parasitism.
- 3.

| Type of Relationship | Not Affected | Benefited | Harmed |
|----------------------|--------------|------------|----------|
| Mutualism | | X X | |
| Parasitism | | X | X |
| Commensalism | X | X | |



Now we are going to see how well you can recognize a relationship.

Watch each video shared below. When done with the video, write down what relationship you saw (mutualism, commensalism, or parasitism) and explain WHY.

[Caribbean Cleaners](#)

[Giving Fish a Bath](#)

[Clownfish and Sea Anemone Partnership](#)



Caribbean Cleaners

Mutualism because the little fish were cleaning the bigger fish. The little fish got a meal and the big fish was cleaned.

Giving Fish a Bath

Parasitism - fish have parasites attached to them that can harm them if they are not cleaned off.

This video also shows some mutualism when the “gobi” cleaners clean the parasites off the fish.

Clownfish and Sea Anemone Partnership

Mutualism - contrary to popular belief that the clownfish-sea anemone relationship is commensalism, clown fish are benefited by the protection offered by the sea anemone, the sea anemone is benefited by food that falls when the clownfish eats.



A final bit of practice

Watch this video, other than the shark, what other organisms do you see? What is their relationship to the shark?

[Lemon Shark](#)

Lemon Shark

The relationship seen here is Commensalism between the Lemon Shark and the Remora fish. The remoras get a free ride and food from the shark, as well as protection from predators, while the shark is not harmed or helped.



Additional Practice

[Symbiotic Relationship Practice](#) - open this link. Read each scenario and write on your paper whether you think the relationship is (C) Commensalism, (M) Mutualism, or (P) Parasitism [Answers](#)

[Practice quiz](#)



Additional Resources

[Symbiotic Relationships](#)

[Ecological Relationships](#)