Symbiotic Relationships

Living organisms that exist in the same ecosystem often work together, or even against each other, in some way in order to survive. This is called a symbiotic relationship. A symbiotic relationship is one where two organisms of two DIFFERENT species interact. There are several types of symbiotic relationships.

Let's look at some of them!

Symbiotic Relationships

Mutualism – "Good for me, good for you!" When two organisms interact and their relationship benefits BOTH of them, it is mutualism. What does the word MUTUAL mean? Remember this type of relationship by remembering that MUTUAL means it goes both ways. ☺

Example: In savannas, a small bird called an Oxpecker rides on the back of rhinos. While he's hitching a ride, the Oxpecker eats bugs off of the rhino's back. It's a win–win because the Oxpecker gets a free ride, and the rhino gets a bath!

Rhinoceros

Photo by Harold Kramer

+

Oxpecker

Photo by Steve Garvie

=

Symbiotic Relationships

Commensalism – "Good for me, doesn't bother you!" In this type of relationship, two species have a relationship where one species is getting something good out of it, while the other species is neither bothered or helped by the relationship.

Example: In the ocean, small organisms called barnacles attach themselves to large whales, such as the blue whale, in order to get a free ride and a place to live. While the whales swim around, the barnacles can eat microorganisms that live in water. The whale is neither bothered or helped by the barnacles.

Blue Whale

Photo by Whit Wells

+

Barnacles

Photo by Mark A. Wilson

=

Symbiotic Relationships

Parasitism – "Good for me, bad for you!" In this type of relationship, one species gets something good out of it, while the other is harmed in some way.
Note: when a species is killed by another for food, it is NOT a symbiotic relationship! It's a prey/predator relationship and that isn't the same thing.

Example: When mosquitoes bite humans, the mosquitoes are getting a good meal! But, that makes us very unhappy because we're left with big, itchy bumps – and that is no fun!

Mosquito

+

Human

=

Honeybee

Symbiotic Sort Card
©2013 Emily Brown

Black-Eyed Susan

Symbiotic Sort Card ©2013 Emily Brown
Photo by Lorax

Hummingbird

Symbiotic Sort Card ©2013 Emily Brown
Photo by Pslawinski

Rhinoceros

Symbiotic Sort Card ©2013 Emily Brown
Photo by Harold Zimmer

Oxpecker

Symbiotic Sort Card ©2013 Emily Brown
Photo by Steve Garvie

Head Lice

Symbiotic Sort Card ©2013 Emily Brown
Photo by Giles San Martin

Fruit Tree

Sea Anemone

Human
{Hair}

Clownfish

Seeds
{Plant, Tree, etc.}

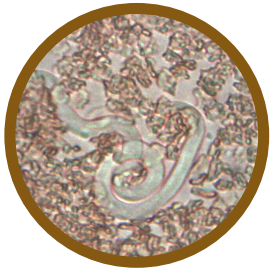
Animal
{Fur}

Remora Fish

Symbiotic Sort Card ©2013 Emily Brown
Photo by Greg Grimes

Shark

Symbiotic Sort Card ©2013 Emily Brown
Photo by Terry Goss



Heartworms

Symbiotic Sort Card
©2013 Emily Brown

Labrador

Symbiotic Sort Card ©2013 Emily Brown
Photo by Christian Bier

Fleas

Symbiotic Sort Card ©2013 Emily Brown
Photo by Kat Masback

Calico Cat

Symbiotic Sort Card
©2013 Emily Brown

Name: _____

Symbiotic Sort

Using the Symbiotic Sort cards, make pairs of organisms that have a symbiotic relationship. Then, on this sheet, record the organisms, state the type of their relationship (mutualism, commensalism, or parasitism, and write a sentence to explain the relationship.

(You will create a total of 9 symbiotic relationships with the symbiotic sort cards.)

1. ORGANISM 1: _____ ORGANISM 2: _____

   Type of Symbiotic Relationship: _____

   Explain: _____

   _____

2. ORGANISM 1: _____ ORGANISM 2: _____

   Type of Symbiotic Relationship: _____

   Explain: _____

   _____

3. ORGANISM 1: _____ ORGANISM 2: _____

   Type of Symbiotic Relationship: _____

   Explain: _____

   _____

4. ORGANISM 1: _____ ORGANISM 2: _____

   Type of Symbiotic Relationship: _____

   Explain: _____

   _____

5. ORGANISM 1: _____ ORGANISM 2: _____

   Type of Symbiotic Relationship: _____

   Explain: _____

   _____

6. ORGANISM 1: _____ ORGANISM 2: _____

Type of Symbiotic Relationship: _____

Explain: _____

_____

7. ORGANISM 1: _____ ORGANISM 2: _____

Type of Symbiotic Relationship: _____

Explain: _____

_____

8. ORGANISM 1: _____ ORGANISM 2: _____

Type of Symbiotic Relationship: _____

Explain: _____

_____

9. ORGANISM 1: _____ ORGANISM 2: _____

Type of Symbiotic Relationship: _____

Explain: _____

_____