

Oct 28 Ecological Relationships Stations 1-3

Station 1: Symbiosis Matching Buddies

Directions: Read each description and find the symbiotic buddy to match. Then decide if each symbiotic relationship is an example of mutualism, commensalism and parasitism.

Hi. I am a fungi looking for someone to share my space. I will protect you if you will obtain food through photosynthesis.	
Hola. I am an acacia tree from Central America. My thorns are the perfect shelter for you and your buddies. The tips of my leaves will satisfy your appetite.	
Don't be afraid; I won't bite. I swim in the ocean, and my shark teeth will never nibble on you. I need someone to keep me clean.	
Hi, there. I am a beautiful orchid looking for a tall, handsome tree. I prefer the strong, silent type. The air provides me with moisture and nutrients.	
I am a northern hog sucker fish. My mouth is a sucker, and I scavenge for food by moving rocks around. Water and small food particles surround me as I eat.	
I am a tiny green hydra. I am very independent and take care of myself. All of my brothers and sisters are crowding me, and I'm looking for a new place to call home. I like to attach myself to shells.	

Click and drag these to match with their buddies above:

Hi, there. I am an algae that can photosynthesize enough for two. I need someone who can protect me.	I am a large tree. I like to stand tall and be in the open air. My canopy awaits your presence.
Hey. I am an ant searching for a plant home where my buddies are welcome. We promise to protect your precious flesh by stinging your enemies.	Hi. I am a minnow. I love to hang out with my minnow friends, but we get tired of looking for food. I am looking for that special someone who is a messy eater with lots of small food particles around them when they eat.
What's up? I am a remora fish. I'd love to swim in the ocean with you. I hope you can overlook that I am a neat freak, but I can't stand to have a messy kitchen.	Yo, I am a mussel. I like to filter water. I am covered by a nice big shell, so I don't like to talk, but just knowing you are near is comforting.

Station 2: Identify Symbiosis

Directions: The table below lists examples of the different types of symbiosis. For each example, decide whether it demonstrates mutualism, commensalism or parasitism. Explain your reasoning in the bottom row.

A bluebird lives in a maple tree. It builds a nest in the tree where its eggs are protected from the harsh environment.	Stinging sea anemones live on the claws of a female boxing crab. The boxing crab uses the anemones like boxing gloves, protecting herself against predators.	As a colony of brachonid wasps undergoes metamorphosis, they live on a hornworm and digest its insides, causing the hornworm to die.
This is an example of:	This is an example of:	This is an example of:
Why?	Why?	Why?

Station 3:

Directions: Read the bit of text below, then fill in the table discussing three interactions between organisms.

Symbiotic Relationships

When two different species of organisms live in close contact, this relationship is called **symbiosis**. The term symbiosis comes from the Greek language and means "living together." In lichens, a fungus and an alga or bacterium coexist in the same physical space and share materials. Some forms of symbiosis are beneficial to both organisms, as seen in lichens. Other forms of symbiosis only benefit one partner, and some forms actually harm one partner. Symbiotic relationships can be classified into three categories:

- **mutualism:** both organisms benefit
- **parasitism:** one organism benefits, the other is harmed
- **commensalism:** one organism benefits, the other is unaffected

Observe the three pictures below. Infer what type of interaction is occurring in each picture then explain why you chose that answer.



Explain:



Explain:



Explain: