## Symbiotic Relationships

**Directions:** Determine which type of symbiotic relationship exists between the two organisms based on the description provided.

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Organisms	Symbiotic Relationship (mutualism, commensalism, parasitism)	Description of Relationship
barnacles and whales		Barnacles create home sites by attaching themselves to whales. As the barnacle is a filter feeder, it also gets access to more water (and more food) due to the relationship. Whale is unaffected.
cuckoo and warbler		A cuckoo lays its eggs in the nest of the warbler. The cuckoo's eggs hatch first and the young kick the warbler eggs out of the nest. The warbler raises the cuckoo babies and the warbler babies aren't hatched.
remora fish and shark		Remoras attach themselves to a shark's body. They travel with the shark and feed on the leftover food scraps after the shark has finished its meal. The shark is unaffected as it's done eating anyway.
ostriches and gazelles		Ostriches and gazelles feed next to each other. They both watch for predators. Because the visual abilities of the two species are different, they can each identify threats that the other animal may not see as readily.
mistletoe and spruce tree		Mistletoe extracts water and nutrients from the spruce tree to the detriment (ill effect) to the spruce.
silver fish and army ants		Silverfish live and hunt with army ants and share the prey. They neither help nor harm the ants.
oxpeckers and rhinoceros		Oxpeckers (bird) feed on the ticks found on a rhinoceros. Both species benefitthe oxpecker gets food and the rhino gets rid of a parasite.
honey guide birds and badgers		Honey guide birds alert and direct badgers to bee hives. The badgers then expose the hives and feed on the honey first. Next the honey guide birds eat.
bison and cowbirds		As bison walk through grass, insects become active and are seen and eaten by cowbirds. This relationship neither harms nor benefits the bison.
tapeworms and humans		Tapeworms reside in human intestine and take nutrients from the human.

yucca flowers and yucca moths	Yucca flowers are pollinated by yucca moths. The moths lay their eggs in the flowers where the larvae hatch and eat some of the developing seeds. Both benefit.
clown fish and sea anemones	Clown fish live among anemones acting as a lure for the sea anemone's prey. The clown fish gets protection and shelter from the anemone.
ants and aphids	Ants offer protection for the aphids who (have no protective features of their own) would otherwise would be food for all sorts of organisms. The aphids "repay" the ants by providing honeydew (a liquid they secrete) for the ants to use as food.
tick and deer	The tick feeds off the blood of the deer. The deer is negatively affected.
hermit crabs and shells	Hermit crabs will move into an old abandoned shell when their shell is no longer big enough to contain them. As the shell is inanimate (not living) it is not affected by this relationship.
stork and bees	The stork uses its saw-like bill to cut up the dead animals it eats. As a result, the dead animal carcass is accessible to some bees for food and egg layers. The stork is neither harmed nor helped by this relationship.
wrasse fish and sea bass	Wrasse fish feed on the parasites found on the black sea bass's body (usually in the mouth). It's like dental floss for fish.