

Symbiotic Relationships Worksheet—Good Buddies

Organisms:	Symbiotic Relationship (parasitic, commensalistic, or mutualistic)	Brief Overview of Relationship:
Barnacle/Whale	1	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/Warbler	2	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/Shark	3	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.
Ostrich/Gazelle	4	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. Both species benefit.
Mistletoe/Spruce	5	Mistletoe extracts water and nutrients from the spruce tree to the detriment (ill effect) to the spruce.
Silverfish/Army Ant	6	Silverfish live and hunt with army ants and share the prey. They neither help nor harm the ants.
Oxpecker/Rhinoceros	7	Oxpeckers (bird) feed on the ticks found on a rhinoceros. Both species benefit...the oxpecker gets food and the rhino gets rid of a parasite.
Mouse/Flea	8	A flea feeds on a mouse's blood to the mouse's detriment
Honey Guide Bird/Badger	9	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. Both benefit
Cowbird/Bison	10	As bison walk through grass, insects become active and are seen and eaten by cowbirds. This relationship neither harms nor benefits the bison.
Human/Tapeworm	11	Tapeworms reside in human intestine and take nutrients from the human.
Yucca Plant/Yucca Moth	12	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.
Wrasse Fish/Black Sea Bass	13	Wrasse fish feed on the parasites found on the black sea bass's body (usually in the mouth). Dental floss for fish—both species benefit
Clown Fish/Sea Anemone	14	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.
Human/E. coli	15	E. Coli is a bacteria that lives in the gut of humans. The human provides the ideal habitat for e coli reproduction and the e coli provides the extra vitamin K that we use.
Ant/Aphid	16	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.
Trees/Epiphytes	17	Epiphytes are a class of plants that grow in the crooks of tree branches. They simply use the tree branches as a way to be higher—closer to the sunlight needed for photosynthesis. The trees aren't affected by this relationship.
Deer/Tick	18	The tick feeds off the blood of the deer. The deer is negatively affected.
Maribou Stork/Bee	19	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.
Hermit Crab/Shell	20	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.

Which type of symbiotic relationship do you think is associated with Co-Evolution? Explain your answer.