# SYMBIOSIS ACTIVITY 2

Next to the title, write which type of symbiosis that is described. NAME

#### ANTS AND APHIDS

Some ant species farm aphids and other insects that feed on sap. The ants protect them from predators and move them to the best spots for getting sap. After the aphids eat the sap, the ants then rub their bellies to make honeydew droplets come out. In this symbiotic relationship, the ants have a constant food source, while the aphids receive protection and shelter.



### SEA ANEMONES AND CLOWNFISH

Sea anemones are attached to rocks and catch prey by stunning them with their poisonous tentacles. Clownfish are immune to the anemone's poison and actually live within its tentacles. Clownfish clean the anemone's tentacles keeping them free from parasites. They also act as bait by luring fish and other prey within striking distance of the anemone. The sea anemone provides protection for the clownfish, because clownfish predators stay away from its stinging tentacles.



### TREE FROGS AND PLANTS

A tree frog uses plants as protection, and the plant is unaffected.



# Snails and green-banded broodsac worm

This worm gets into the body of the snail when it eats bird poop with eggs in it. The worm then grows inside the snail's antennae. The thick antennae becomes

colorful and twitches to attract birds. The worm also invades the snail's brain, forcing it to wander around the leaves like a zombie in plain sight, without the ability to hide. A bird then eats one of these antennae, so now the worm enters the bird. The worm lays its eggs in the bird's digestive system. The eggs exit when the bird poops. Then, it all starts again.



### **BACTERIA AND HUMANS**

Bacteria live in the intestines of humans. The bacteria receive food and housing (they nibble on the food in our intestines), and we get our food digested more completely so that vitamins are released. We also get protection against bacteria that are harmful to us, because these good bacteria can eat the bad ones.



### **Caterpillars and Glyptapanteles wasps**

This wasp introduces its eggs in the body of a butterfly caterpillar. When they hatch, the larvae feed on the caterpillar's fluids – without killing it – until they are fairly big. Then, they exit its body by making a hole through its skin. Once

outside, they form a cocoon to undergo metamorphosis. But the nightmare doesn't end there. The wasp put part of its DNA in the caterpillar, forcing it to follow its commands. The caterpillar will remain by the larvae until they complete their metamorphosis, even using its silk to protect them. Once the process is complete, the caterpillar dies of dehydration and starvation.



## **CROCODILES AND PLOVERS**



Crocodiles have the strongest and fastest bite in the animal kingdom. To keep their most teeth in top condition, they're constantly replacing the 80 teeth in their snout (they do this 2 or 3 times per year). The food particles that stick between their teeth can cause infections, so they allow plovers to feed on this lodged food.



## **Birds and Army Ants**



Birds trail army ants not to feed on them but to feed on insects escaping the ants as they move across the forest floor. The birds easily catch the prey while the ants remain unaffected. Due to their aggressive nature, painful bites, and poison, birds avoid eating army ants.



Barnacles are crustaceans that are unable to move on their own. During the larval stage, they stick to other organisms such as whales or attach to shells, ships, and rocks. They grow and develop on these surfaces without negatively affecting the host. Barnacles feed on plankton and other food materials as the whales move. This way, they benefit from transportation and nutrition. They do not feed on blood or flesh; therefore, they cause no harm to the whale.

