

Name: _____

Determine the Symbiotic Relationship

For each relationship described below, determine if it is

A) Commensalism

B) Parasitism

C) Mutualism

D) Predation

(Letters can be used more than once).

1. _____ The red-billed ox pecker obtains a steady food supply by constantly picking ticks off the bodies of large animals, such as giraffe, zebra, and rhinoceros. This helps the animals get rid of the parasites.



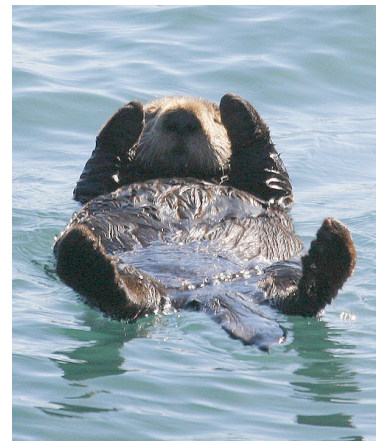
2. _____ Mistletoe can grow on oak trees and extract water and nutrients at the oak tree's expense. Given this information, which type of symbiotic relationship is found among mistletoe and oak trees?



3. _____ Remora sharks are small sharks that have suckers on the top of their head, and can attach themselves to sea turtles, rays, sharks, large fish and whales. They hitch a ride and feed off the leftovers scattered from their host. The host is unaffected by this behavior.



4. _____ Sea otters often float and sleep on forests of kelp (giant seaweed), in which they entangle themselves to provide protection from the swirling sea. In return, sea otters eat urchins, which eat kelp. Which type of symbiotic relationship is shared among sea otters and kelp?



5. _____ Barnacles anchor themselves to objects and wait for food to come. Some barnacles will attach to the skin of a whale where they are brought to new food sources. The whale is neither harmed nor benefitted.



6. _____ Some species of algae grow on fungi. The algae make sugars by the process of photosynthesis, which helps make food for the fungus, as well. The fungus provides moisture for the algae.



7. _____ A certain wasp species actually lays its eggs under the skin of a hornworm. Once the eggs hatch, the young wasp larvae feed on the internal organs of the hornworm and hatch out of the hornworm's body.



8. _____ Some plant species produce a coating of sugar which attracts many insects, in particular ants. Because the plant's sugar is readily available, the ant is very protective of the leaf; fighting off invading leaf-eaters. Yet, these ants welcome certain caterpillars to stay and feast on the leaves. That is because some caterpillars have a special gland that secretes its own sugar. The ants will actually eat the caterpillar's sugar right off of the caterpillar. Also, interestingly enough, these ants will protect the caterpillar against any possible "assassin" bug predators that might want to hunt the caterpillars.

