

Good Buddies - Symbiosis

Name _____

Fill in the chart below with pairs of organisms to illustrate examples of each type of symbiotic relationship. Use ☺ to show if the organism is helped, ☹ for not affected, or ☹ for harmed.

Commensalism

Mutualism

Parasitism

Good Buddies Card Game

- 1 – The dealer passes out 5 cards to each player. The players may look at their cards.
- 2 – The person to the dealer's left starts the game by asking another player (only one) for a specific card - one that would be a good buddy to a card in his hand.
- 3 – If a person does not make a match, he must draw one card from the pile and his turn is over.
- 4 – If the person makes a match, he must say the type of symbiosis that exists between the two organisms before laying down the set of cards and his turn is over. If he cannot give the correct answer, he must hold on to the set and try again on his next turn. He will not get another try to match a different card until the next turn.
- 5 – Players can ask for a card only once during each hand whether or not they make a match.
- 6 – Play continues until one player is out of cards or there are no more cards in the draw pile. The person with the most correct matches laid down during the game is the winner!

Good Buddies – Symbiosis

Classroom Copy

Commensalism - A relationship in which one organism benefits and the other is not harmed nor helped.

Barnacles create home sites by attaching themselves to whales. This relationship neither harms nor benefits the whales.

Remoras attach themselves to a shark's body. They then travel with the shark and feed on the leftover food scraps from the shark's meals. The relationship neither harms nor benefits the shark.

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 laying. The relationship neither harms nor benefits the stork.

Hermit crabs live in shells made and then abandoned by snails. This relationship neither helps nor harms the snails.

As bison walk through grass, insects become active and are seen and eaten by cowbirds. The relationship neither harms nor benefits the bison.

Orchids grow inside a bromeliad plant. The orchid obtains water and nutrients from the bromeliad, but does not help or harm it.

A sparrow will build its nest under the nest of an osprey. The smaller birds get protection because other predators will not mess with the osprey. The osprey are not helped nor harmed by the sparrow.

Mutualism - A relationship in which both organisms benefit.

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 species benefit.

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 species benefit.

Ostriches and gazelles feed next to each other. They both watch for predators and alert each other to danger. Because the visual abilities of the two species are different, they can identify threats that the other animal would not see as readily.

Oxpeckers feed on the ticks found on a rhinoceros. The oxpeckers get a meal and the rhinoceros is helped by the removal of the ticks.

Wrasse fish feed on the parasites found on the black sea bass's body. The wrasse fish get a meal and the black sea bass is helped by the removal of the parasites.

Parasitism - A relationship in which one organism benefits and the other is harmed.

Mistletoe extracts water and nutrients from a spruce tree. The spruce tree is harmed.

A cuckoo may lay its eggs in a warbler's nest. The cuckoo's young will knock the warbler's eggs out of a nest and the warbler will raise the cuckoo's young.

A flea feeds on a mouse's blood and harms the mouse.

Ticks will feed on a deer's blood and harm the deer.

Heartworms develop inside a dog's heart. The worms cause health problems and may result in death.

A wasp lays its eggs on a caterpillar. When the wasp eggs hatch, the larva will eat the caterpillar and kill it.



Gazelle



Ostrich



Cuckoo



Warbler



Yucca



Yucca Moth



Whale



Barnacles



Spruce



Badger



Orchid



Bromeliad



Wasp



Caterpillar



Heartworms



Dog



Osprey



Sparrow



Flea



Mouse



Deer



Tick



Hermit Crab



Snail



Maribou Stork



Bee



Honey Guide Bird



Mistletoe



Rhinoceros



Oxpecker



Shark



Remora



Black Sea Bass



Wrasse Fish



Cowbird



Bison