

Name: \_\_\_\_\_

## Species Interactions Worksheet

### *Part A: Definitions*

	Definition
Interspecific Competition	
Intraspecific Competition	
Symbiosis	
Commensalism	
Mutualism	
Parasitism	

**Directions:** Using your definitions above, use the following symbols to describe the interactions between organisms in each type of species interaction.

+ = organism benefits

- = organism is harmed

0 = organism neither benefits nor is harmed (neutral)

Interaction	Organism #1	Organism #2
Predation		
Competition		
Mutualism		
Commensalism		
Parasitism		

**Part B: True or False**

- \_\_\_\_\_ 1. Camouflage is an adaptation that has evolved through natural selection.
- \_\_\_\_\_ 2. Predation is a relationship in which the prey consumes the predator.
- \_\_\_\_\_ 3. Interspecific competition occurs between members of the same species.
- \_\_\_\_\_ 4. Intraspecific competition often leads to extinction (same niche)
- \_\_\_\_\_ 5. Mutualism is a symbiotic relationship in which both species benefit.
- \_\_\_\_\_ 6. If a parasite kills its host, the parasite may also die.
- \_\_\_\_\_ 7. Food, water, shelter, light and other resources *are often limited*

**Part C: Scenarios**

**Directions:** Read through each scenario and determine whether it is a case of parasitism, predation, competition, mutualism, commensalism. In COMPLETE SENTENCES, explain the reasoning behind each choice.

- 1. ***Shrimp and Sea Anemone:*** The shrimp is immune to the stinging tentacles of the sea anemone. By hiding in the sea anemone, the shrimp is protected from predators.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 2. ***Algae and Coral:*** In a marine environment algae can be found living on coral. Algae provides the coral with inorganic nutrients and the coral provides the algae with shelter.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. **Tapeworm and Dog:** The tapeworm attaches to the intestinal wall of the dog and takes nutrients consumed by the dog.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

4. **Ant and Acacia Tree:** The ant burrows into a thorn of the acacia tree to live and eat sugar secreted by the tree. The ants benefit the tree by attacking other predators.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

5. **Cleaner Fish and Shark:** The cleaner fish feeds on parasites in the shark's mouth and gills.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

6. **Tick and Cow:** The tick burrows into the cow's skin to suck blood.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

7. **Komodo Dragon and Water Buffalo:** The komodo dragon bites a water buffalo to inject it with venom. About 1 week later, the water buffalo dies of poisoning and is eaten by the komodo dragon.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. **Tigers and Golden Jackals:** Lone golden jackals often follow tigers to feed on the tiger's kills once the tiger has finished eating.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. **Deer and Bison:** A deer and a bison both eat the same grass during the fall months.

Interaction: \_\_\_\_\_

Reasoning: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_