

**APES- Unit #3 Study Guide**  
***Species Interactions and Community Ecology***

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

1: What makes the Zebra Mussel an **invasive species**?

2: Define the following *species interactions*:

\* **Competition:**

\* **Predation, Parasitism, and Herbivory:**

\* **Mutualism:**

3: What are some of the *resources* that species compete for in competition?

4: Define **Competitive Exclusion**:

5: What must happen for species to co-exist?

6: What is the difference between **fundamental** and **realized niche**? *Explain why a species wouldn't fulfill its fundamental niche?*

7: Give an example of **resource partitioning**:

8: How does **character displacement** help with competition?

9: Explain how **predator and prey** populations depend on each other:

10: How does **Natural Selection** strengthen population "*fitness*"?

11: *Define the following:*

\* **Cryptic Coloration:**

\* **Warning Coloration:**

\* **Mimicry:**

12: Define **Parasitism:**

13: What is the idea of "*coevolution*"?

14: What are some *plant adaptations* that help to protect plants against herbivory?

15: Explain how *pollination is a form of mutualism:*

16: *Define the following:*

\* **Allelopathy:**

\* **Commensalism:**

\* **Facilitation:**

17: What is a **community** of organisms?

18: Draw a trophic level pyramid with the following *terms/definitions (examples)* below:

**Autotrophs**

**Primary Consumers**

**Secondary Consumers**

**Tertiary Consumers**

**Omnivores**

**Detritivores**

**Decomposers**

19: How is *most energy* lost in an ecosystem?

20: Explain why this statement is true: “ *A human vegetarian’s ecological footprint is smaller than a meat-eater’s footprint.* ”

21: What is the difference between a **food chain** and a **food web**?

22: What is a **keystone species** and what happens to an ecosystem when it *gets removed*?

23: What is a **trophic cascade**? *Why is it important?*

24: Communities of organisms respond to disturbances differently. Explain **resistance and resilience**.

25: What is an **invasive species**? How do we control a species that has become invasive? (*Name several ways*)

26: What is happening with *ecological restoration* in the Florida Everglades?

27: Biomes: Name the type of SOILS in the following:

\* **Temperate deciduous forests:**

\* **Temperate rainforests:**

\* **Tropical rainforests:**

\* **Tropical dry forest:**

\* **Desert:**

\* **Tundra:**

\* **Boreal forest (Taiga):**

28: How do biomes change with altitude? *Explain.*