Name: \_**Ms. F’s Answer Key**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_\_\_\_

Ecology Quiz—35 Points

1. Put this list in order from **smallest** to **largest**: (3 pts)  
   population, cell, community, organism, biosphere, ecosystem  
   \_**cell,organism, population, community, ecosystem, biosphere** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Give an example of a biotic factor interacting with an abiotic factor. (2 pts)  
   \_\_**Sample: A deer drinking water** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. A niche is (1 pt)  
   A) When one species helps another species  
   B) Where an animal lives  
   C) What makes an organism adapt  
   **D) An organism’s job or lifestyle in an ecosystem**
4. Give an example of a niche: (2 pts)  
   \_\_**sample: Plants produce food for a community** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What are two specific reasons organisms depend on each other? (2 pts)  
   \_\_**1. Organisms depend on each other for food   
    2. Organisms can depend on each other for shelter (for example, a bird nesting in a tree or a clownfish living in a sea anemone)**
6. What biome do we live in? (2 pts)  
   A) Coniferous forest  
   **B) Deciduous forest**  
   C) Taiga  
   D) Tropical forest
7. How is the temperature different in our home biome than in the tundra? (1 pt)  
   \_\_**It is much colder in the tundra than in the deciduous forest.**
8. How is the precipitation different in our home biome than in the rainforest? (1 pt)  
   \_\_**In the rainforest there is a lot more precipitation than there is in the deciduous forest.**
9. Which of the following is an example of competition? (2 pts)  
   A) A lion chasing a zebra  
   B) A hawk hunting a mouse  
   **C) Two plants on the rainforest floor that both need sunlight**  
   D) A dog chasing a cat
10. Give two examples of how predators have adapted to catch their prey. (2 pts)  
    **Some predators have camouflage that helps them sneak up on prey. Other predators hunt in packs to bring down prey.**
11. In the Arctic Circle, you would find: (2 pt)  
    A) Tropical rainforest  
    **B) Tundra**  
    C) Deciduous Forest  
    D) Desert
12. What is the difference between interspecific competition and intraspecific competition? (2 pts)  
    \_**Interspecific competition happens between two individuals from different species while intraspecific competition happens between two individuals of the same species.**
13. Give one example of an adaptation and explain why your example is correct. (3 pts)  
    \_**Cactus have adapted to conserve water. This is an adaptation because it is a trait that helps them survive in the hot, dry desert.**

Questions 14-17 give examples of three different types of species interactions. Match the example with the correct type of interaction. (4 pts)

\_\_\_\_**C**\_\_\_\_ 14. A great white shark hunts a seal. A. Mutualism

\_\_\_\_**D**\_\_\_15. A tapeworm lives inside a human. B. Commensalism

\_\_\_\_\_**A**\_\_16. Bees collect nectar from flowers and transfer C. Predation pollen.

\_\_\_**B**\_\_\_ 17. A bird builds a nest on a tree branch. D. Parasitism

18. Does the climatograph below describe a tundra or a rainforest? Explain your answer—your explanation should include both **temperature** and **precipitation**. (3 pts)  
  
  
\_\_\_\_\_\_**This is a rainforest. You can tell because the temperature is high and it is constant all year. There is also a lot of rain, and the rainfalls all year long. In a tundra you would see much colder temperatures and much less precipitation. You would also see more variation between seasons.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19. Why is it important for us to study ecology? There is not one correct answer here, but you need to write in complete sentences and have a logical answer in order to get credit. (3 pts)

**Ecology is important because we are a part of the Earth’s ecosystems. We can have a great impact on the other organisms that live on Earth, and they can have a big impact on us as well. In order to help protect the world we live in, we need to understand how organisms interact with one another and the environment.**