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Chapter 8 Study Guide: Test 1/26/17 Hour:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 8, Lesson 1 (page 285) (answer all questions on a separate piece of paper; due on 01/25/17)**

1. An organism’s habitat must provide what?

**Food, water and shelter and anything else an organism needs to survive**.

1. What are biotic factors? Give 5 examples.

**Biotic factors are the living things or once living things in an ecosystem. Biotic factors examples would be plants, animals, bacteria, algae, fungi, dog poop, a fallen tree.**

1. What are abiotic factors? Give 5 examples.

**Abiotic factors would be the non-living things in an ecosystem. Examples of abiotic factors would be: water, sunlight, air, temperature, precipitation, temperature.**

1. List the ecological organization in order. (page 288)

**The order of ecological organization from the smallest to the largest unit is: organism, population, community, ecosystem.**

1. Define organism, population, communities, and ecosystems. (Give examples of each.)

**Organism:-a living thing -a prairie dog.**

**Population - All the members of one species that live in a defined area. Several prairie dogs living in a prairie.**

**Community - All the different species that live together in an area. The population of prairie dogs, the population of owls and the population of deer that live in a prairie.**

**Ecosystem - All the living and non-living components of an area. The population of prairie dogs, the population of owls and the population of deer that live in a prairie along with the water the air and the mountains of an area.**

1. What is the study of ecology? **Ecology is the study of how organisms interact with each other and their environment.**

**Chapter 8, Lesson 2 (page 290)**

1. What is a niche? Give an example.

**An ecological niche is the role and position a species has in its environment; how it meets its needs for food and shelter, how it survives, and how it reproduces. A species' niche includes all of its interactions with the biotic and abiotic factors of its environment.**

**For example Raccoons ecological niche is:**

**Eat: Fish, clams, crayfish, berries, fruits, plants, nuts, insects, squirrels, mice, gophers, frogs, eggs, rodents, rats, (small mammals) etc…**

**-The diet of the omnivorous raccoon, which is usually nocturnal (active at night), consists of about 40% invertebrates, 33% plant foods, and 27% vertebrates.**

**-In urban environments where resources are limited, raccoons are known for sifting though garbage.**

**Eaten By: Wolves, coyotes, domestic dogs, bobcats, foxes, pumas etc…**

**Environment: Raccoons help the envornment by spreading plant seeds. Seeds from plants get stuck in the fur of the raccoon, and eventually get brushed off. These seeds are then pushed back into the earth, and are able to grow in a new area, therefore expanding the range of existence of that type of plant.**

1. What are limited resources? Give examples.

**Limited resources are those things that are important for the survival of organisms but are available in limited quantity. Some examples of limited resources would be food, water and living space.**

1. When do we see competition?

**When there is not enough food, water, space or mates.**

1. What is predation? **Relationship between two organisms of unlike species in which one of them acts as predator that captures and feeds on the other organism that serves as the prey.**
2. Define predator and prey. Give examples of each. **A predator is an organism that eats another organism. The prey is the organism which the predator eats. Some examples of predator and prey are lion and zebra, bear and fish, and fox and rabbit.**
3. Define the three types of symbiosis? **Give examples of each not from the book. The three major types of symbiosis are mutualism, where both species benefit, commensalism, where one species benefits and the other is unaffected, and parasitism, where one species benefits and the other is harmed.** Oxpeckers and zebras or rhinos - In this relationship, the oxpecker (a bird) lives on the zebra or rhino, sustaining itself by eating all of the bugs and parasites on the animal. The bird benefits by having a readily available source of food. The zebra or rhino benefits from having the bugs removed. Examples of commensalism include remora fish attaching to the bodies of sharks and eating scraps of food that escape their jaws, and barnacles living on the jaws of whales with a similar feeding strategy. Parasitic relationships are many, and parasites include all disease-causing organisms. This category also includes insects such as fleas that suck the blood of hosts externally.
4. Define host and parasite. Give examples of each.

**Chapter 8, Lesson 3 (page 296) \*\*\*Students use the GRAPHIC ORGANIZER we did in class as well\*\*\***

1. What are the six major biomes? **Tundra, Boreal forest, deciduous forest, tropical rain forest, grassland and desert.**
2. Which two biomes are most similar in regard to rainfall? **tundra and desert**
3. Which biome has permafrost? **tundra.**
4. Which biome has the greatest biodiversity ? **tropical rainforest**
5. Which biome do you live in? **deciduous forest**
6. Which biome turns “swampy” in the summer? **Taiga aka Boreal Forest**
7. Which biome would you find lions, giraffes, and elephants? **grassland.**
8. Which biome has very hot days and cool nights with little precipitation, few plants, and poor soil? **desert**.
9. Which biome occurs in the interiors of continents, hot in summer and cool in winter, moderate to low precipitation, mostly grasses and small shrubs, and can have large mammals or a variety of smaller ones?

**grassland**

1. Which biome is near the equator where it is hot all year with heavy rain? There are many, many kinds of plants and animals there (also known as the biome with the highest biodiversity). **tropical rainforest**
2. The Sahara, Mojave and Gobi are examples of this biome? **desert.**