Unit 8 Review

Summary

- Organisms that interact with one another and with their nonliving environment make up an ecosystem. All the organisms that live in an ecosystem make up a community. A population is all the organisms of the same species that live in a community.
- All living things need energy to survive. Organisms get their energy from food.
- Organisms that can make their own food are producers. Organisms that obtain energy by eating other organisms are consumers. Organisms that feed on dead matter are decomposers.
- Energy flows through an ecosystem by the feeding relationships of its populations. A food chain is a model of feeding relationships in an ecosystem. A food web shows how food chains are connected. An energy pyramid shows how energy flows through an ecosystem.
- A large geographic region with a certain climate and specific communities is a biome. The six land biomes are the tundra, taiga, deciduous forest, rain forest, desert, and grassland biomes. The two water biomes are the freshwater and the marine biomes.
- The kinds of populations found in each biome depend on the amount of energy the biome receives. The more energy a biome receives, the more diverse are its populations.
- Natural resources are materials in an environment used by people. Some natural resources can be replaced. These are called renewable resources. Resources that cannot be replaced are called non-renewable resources.
- As the human population has grown, the demands for resources has increased. Pollution and destruction of ecosystems are two effects of the increased use of natural resources. Conservation and recycling are two ways humans can preserve natural resources.

For Your Portfolio

1. Think of an ecosystem that you have observed, such as a pond ecosystem or a forest ecosystem. You can use library resources to find out more about this ecosystem. List a minimum of five organisms that live in the ecosystem. Then, draw a food chain to show a feeding relationship in the ecosystem.

2. Make a travel brochure for people traveling to a biome other than the one in which you live. Identify locations on earth where travelers will find this biome. In your brochure, give the travelers some tips on the type of clothing they should pack. Also inform them of plant and animal populations they may observe.

3. Suppose you were a display designer at a local zoo. Choose an animal, and research the habitat of that animal. Then sketch out a display using graph paper. Be sure that your design includes as many elements as possible from the animal's natural surroundings. This can include the plants they use, the organisms they eat, what they use for shelter, and so on. Draw the display to scale.

4. Work with classmates to create a skit in which different organisms try to persuade humans to take greater care of the earth. You may want to be one of the following endangered species: California condor, white rhino, giant panda, snow leopard, black-footed ferret, or black lace cactus.

5. The dodo bird is an example of an organism that has become extinct because of human interference with an ecosystem. Use reference texts to learn more about the dodo bird. Write a report that explains how humans caused the extinction of this organism.

Unit 8 PRACTICE TEST

Match the terms on the left with the definitions on the right.

_____	1.	biome	a.	eats other organisms
_____	2.	community	b.	materials from the earth used by people
_____	3.	conservation	c.	an area with a certain climate and specific communities
_____	4.	consumer	d.	organisms in an ecosystem
_____	5.	decomposer	e.	one species in an ecosystem
_____	6.	ecosystem	f.	using resources wisely
_____	7.	natural resource	g.	can make its own food
_____	8.	population	h.	eats dead organisms
_____	9.	producer	i.	communities interacting with the environment

Give a brief answer for each of the following.

10. Explain the relationship among populations, communities, and ecosystems.

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11. How does energy enter an ecosystem? _____

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12. Explain the difference between renewable and non-renewable natural resources. Give an example of each. _____

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Answer one of the following questions.

13. Can an organism exist in any type of biome? Explain your answer in a short essay.

14. What are some ways that people have harmed the earth's ecosystems? What are some of the ways people can help preserve the earth's ecosystems?