Chapter 5 Biological Diversity and Conservation

In your textbook, *read about biological diversity.*

Use the terms below just once to complete the passage. You will not use all the terms.

environments	variety	greater	space	species
biological diversity	equator	less	decrease	increase

(1) _____ refers to the **(2)** _____ of life in an

area. Another word for biological diversity is biodiversity. The simplest measure of biodiversity is the

number of **(3)** _____ that live in a certain area. The more species there are,

the **(4)** _____ is the biodiversity of the area. Biodiversity on land tends to

(5) _____ as you move toward the **(6)** _____ .

Biodiversity is greater on large islands than on small islands because large islands have more

(7) _____ and a greater variety of **(8)** _____ .

In your textbook, *read about the importance of biodiversity.*

For each statement below, write <u>true</u> or <u>false</u>.

_____ **9.** Biodiversity provides our world with beauty.

_____ **10.** The loss of a species from an ecosystem usually has no effect because of the presence of other species in the ecosystem.

_____ **11.** Biodiversity decreases the stability of ecosystems because more species are competing with each other.

_____ **12.** Increasing the biodiversity of an ecosystem may result in more niches.

_____ **13.** Diseases are more likely to spread in an ecosystem with high biodiversity than in an ecosystem with low biodiversity.

_____ **14.** A decrease in Earth's biodiversity may affect people's diets.

_____ **15.** Preserving diverse plant species may lead to the discovery of new drugs in the future.

In your textbook, *read about the loss of biodiversity.*

For each item in Column A, write the letter of the matching item in Column B.

Column A	Column B
_____ **16.** The number of members of a species is so low that there is a possibility of extinction.	**a.** passenger pigeon
_____ **17.** This animal is an example of an endangered species.	**b.** threatened species
_____ **18.** The population of a species begins declining rapidly.	**c.** black rhinoceros
_____ **19.** This animal is an example of an extinct species.	**d.** African elephant
_____ **20.** All members of a species have died, so the species no longer exists.	**e.** extinct species
_____ **21.** This animal is an example of a threatened species.	**f.** endangered species

In your textbook, *read about threats to biodiversity.*

Complete the table by checking the correct column for each statement.

Statement	Habitat Loss	Habitat Fragmentation	Habitat Degradation
22. Animals have no migratory route.			
23. A rain forest is burned.			
24. A highway divides a forest.			
25. Acid precipitation leaches nutrients from the soil.			
26. Detergents and other chemicals pollute bodies of water.			
27. Coral is mined for building materials.			
28. The reduction of the ozone layer causes more ultraviolet radiation to reach Earth's surface.			

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Circle the letter of the choice that best completes the statement.

29. When species lose their habitats, they may
   a. lack food.
   b. lack shelter.
   c. be in danger of becoming extinct.
   d. all of the above.

30. Habitat fragmentation often leads to
   a. increased species diversity within an area.
   b. larger habitats for species.
   c. decreased species diversity within an area.
   d. an increased food supply for species.

31. Different conditions along the boundaries of an ecosystem are called
   a. habitat fragmentation.   **b.** edge effect.   **c.** habitat loss.   **d.** canopy effect.

32. The greatest source of air pollution is
   a. volcanic eruptions.
   b. forest fires.
   c. burning fossil fuels.
   d. CFCs.

33. Acid precipitation
   a. may decrease biodiversity on land.
   b. has no effect on biodiversity.
   c. may increase biodiversity in water.
   d. both a and c.

34. The reduction of the ozone layer is caused by
   a. burning fossil fuels.   **b.** acid precipitation.   **c.** heavy metals.   **d.** CFCs.

35. Algal blooms in lakes
   a. are caused by acid precipitation.
   b. decrease the amount of oxygen in the lake when they decay.
   c. clog the gills of fish.
   d. both a and b.

36. When exotic species are introduced into an area, their populations may grow exponentially because the species
   a. are large.
   b. are predators.
   c. lack competitors and predators.
   d. are small.

37. The African elephant population was greatly reduced between 1970 and 1990 due to
   a. habitat degradation.
   b. excessive hunting.
   c. habitat loss.
   d. pollution.