**Chapter 21** **Study Guide Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. What is the estimation made by biologists of the current species extinction rate? Where are the majority of these extinctions occurring?
2. What are some benefits that ecosystems provide for mankind?
3. An estimate of total number of named eukaryotes species is \_\_\_\_\_\_\_\_\_\_\_\_\_\_. This is most likely less than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of total number of eukaryote species.
4. What are some hypotheses for why biodiversity increases as one gets closer to the equator.
5. List several medications that are derived from plant compounds.
6. What type of biological organism do antibiotics come from?
7. List one benefit of maintaining crop biodiversity.
8. What are seed banks/vaults?
9. How do the following relate to food production:
10. Soils
11. Plant pollinators
12. Crop pest control
13. Are most fisheries on earth maintained sustainably? What is a possible consequence of this situation?
14. What are the 4 major threats to biodiversity on this planet?
15. Why have Bornea and Sumatra lost about half their forests in the 20th century?
16. Why are amphibians at particular risk for population declines and extinction?
17. Why has the western Atlantic cod fishery become unsustainable in recent years?
18. List some species that are threatened by the bush meat trade.
19. What happened when the Nile perch was introduced into Lake Victoria?
20. What happened when the brown tree snake was introduced into Guam?
21. What happened when the zebra mussel was introduced into the Great Lakes?
22. What causes the warming of the earth associated with climate change? List examples of greenhouse gases.
23. What are some effects of the warming trends associated with climate change?
24. The number of species on the planet is the result of an equilibrium between \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
25. The fifth mass extinction occurred \_\_\_\_\_\_\_\_\_\_\_ years ago and wiped out \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
26. What is causing the 6th (current) mass extinction?
27. What happened to the dodo bird? The Steller’s sea cow?
28. Species-area estimates predict that present day extinction rates are \_\_\_\_\_\_\_\_\_\_\_ times background rate.
29. The first national park with land set aside to remain in a wilderness state was \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
30. What was the result of the following:
31. The Convention on International Trade in Endangered Species Treaty
32. The Endangered Species Act
33. The Migratory Bird Treaty Act
34. The Kyoto Protocol
35. How many biodiversity hotspots currently exist?
36. Why are large preserves better than small ones?
37. List a few examples of regulations associated with the use of a preserve.
38. Why did reintroduction of the wolf into Yellowstone National Park increase biodiversity?
39. What happens when dams are removed in locations in the United States?
40. How do captive breeding programs and education programs associated with zoos play a role in conservation efforts?
41. Be familiar with the vocabulary in the chapter. You can use the last slides in the PPT as a guide.