

Chapter 16 Concept Review

B I O L O G Y

Directions: Answer the following questions using your notes and textbook

1. Thomas _____ (late 1700's)- studied human population growth and said was growing faster than Earth's resources. Modern scientists use his observations and predictions when describing ecosystem's _____ *capacity*
2. Humans have modified their environment through agriculture, transportation, medical advances, sanitation, etc. This _____ the carrying capacity
3. _____ *resources*- they are used faster than they are formed (e.g. oil, natural gas, coal)
4. _____ *resources*- resources that cannot be used up or can replenish themselves over time (e.g. wind energy, solar, lumber, etc.)
5. _____ - The amount of land necessary to produce and maintain enough food and water, shelter, energy and waste
6. _____ - describes any undesirable factor, or pollutant, that is added to the air, water, or soil
7. *Smog*- type of air pollution caused by interaction of _____ with pollutants produced by fossil fuel emissions
8. _____ - microscopic bits of dust, metal, and unburned fuel (1-10 microns in size) that are produced by many different industrial processes
9. _____ - produced by reactions of nitrogen oxide and oxygen forming ozone (O_3)
10. _____ - chemicals from fossil fuel emissions can lead to formation of acid rain that can affect many environments
11. *Greenhouse effect*- greenhouse gasses act like _____ to slow loss of heat through atmosphere
 - a. Include: _____, carbon dioxide, _____
 - b. Absorb _____ radiation trying to escape into space from Earth's surface
12. Global warming- the trend of increasing global _____
13. _____ species- a species that can provide a sign, or indication, of the quality of the ecosystems environmental conditions

14. _____ - as pollutant moves up the food chain, it's concentration increases
15. The loss of _____ and growing _____ problems are affecting animal and plant population around the world
16. The loss of biodiversity has a long term effects on _____ of ecosystems
17. *Habitat* _____ - when barrier forms that prevents an organism from accessing its entire home range
18. _____ - any organism that was brought to an ecosystem as the result of human activities
19. _____ *development*- a practice in which natural resources are used and managed in a way that meets current needs without hurting future generations
20. *Endangered Species Act*- designed to protect individual _____ by establishing protection for organism and its environment
21. Often called _____ species (listed species), because its protection also protect wide range of other species
22. Environmental Protection Agency- created as part of National Environmental Policy Act in _____
23. Clean Air Act, Clean Water Act, Endangered Species Act have major _____ on environment
24. Formation of National Parks to preserve large areas of _____ has protected ecosystems
25. A sustainable Earth- humans represent an integral part of Earth's _____
- a. We have ability to control how fast our _____ grows, through controlling birth rates
 - b. We can develop _____ to produce more food and produce less waste
 - c. We have ability to _____ our practices and take action to protect and maintain ecosystems.