

Ch. 1: Workbook

NAME: _____

Section A: Completion

1. Life on Earth most likely began about four billion years ago in an ancient _____. **P 2**
2. The _____ is often compared to a spacecraft (confined, self-sufficient, and traveling through space.) **P 2**
3. A natural resource is _____ if it is replenished at a rate comparable to its rate of consumption by humans or other users. **P 2**
4. Early _____ lived in small groups foraging for food (hunting, gathering, and fishing.) **P 3**
5. In the late 1800s, the beginning of the Industrial Revolution in _____ triggered a major increase in the demand for more of Earth's resources. **P 3**
6. The development of iron-making _____ allowed better roads and railways. **P 3**
7. Between 1810 and 1960, due in large part to modern medicine and better food production methods, the human population had a period of _____ growth **P 4**
8. According to United Nations statistics, about 100,000 people die from _____ or poverty-related illnesses each day. **P 4**
9. _____ is concerned with finding consistency between our beliefs and our observations. **P 5**
10. A _____ method is a planned, organized approach to solving a problem or answering a question. **P 5**
11. A good scientific experiment tests only one _____, or changeable factor, at a time. **P 5**
12. The _____ variable in an experiment is the factor that is manipulated by the experimenter. **P 6**
13. A _____ variable is a factor that can change, or respond, if the independent variable is changed. **P 6**
14. _____, or controlled variables, are factors that do not change during an experiment. **P 6**
15. Sometimes, the _____ disproves the original hypothesis. In such a case, because the hypothesis is not supported by the data, the hypothesis must be rejected and a new one developed. **P 8**
16. The word _____ is usually understood to mean the surrounding conditions that affect people and other organisms. **P 8**
17. _____ is the study of the way organisms interact with each other and with their non-living surroundings. **P 8**

18. _____ factors can be organized into several broad categories: energy, non-living matter, and processes that involve the interactions of nonliving matter and energy. **P 9**
19. The _____ factors influencing an organism include all forms of life with which it interacts. **P 10**
20. In the process called _____, water, carbon dioxide, and light energy are used by all autotrophs to produce sugar (chemical energy). **P 10**
21. When organisms die, their remains are broken down into nutrients by _____ such as insects, snails, fungi, and microscopic organisms. **P 10**
22. Most food chains are interconnected with other food chains. These interconnections create _____ **P 11**
23. The _____ period started when people began to realize that we are part of the big biosphere called Earth, and anything we do to it will have a direct or indirect impact upon all of us. **P 14**
24. Global _____ refers to cooperative problem-solving arrangements. **P 15**
25. The most striking change that has taken place in the environmental movement of the modern era is the _____ in attitude about the place of humans in this biosphere. **P 15**
26. The _____ ethic is based on the individual (egocentrism). **P 16**
27. The _____ ethic considers nature special in itself. **P16**
28. The _____ ethic stresses a balance between total development and absolute preservation. **P 17**
29. The term _____ is an abbreviated form of “ecological system.” **P 17**

Section B: Short Answer

30. What is the difference between a **FOOD CHAIN** and a **FOOD WEB**? (p. 10 -12)

Food Chain:
Food Web:

31. List **THREE** predators and their prey in a bog ecosystem.

PREDATOR	PREY
1.	
2.	
3.	

32. Why does biomass decrease as we ascend the food chain?

33. What are the implications of decreasing biomass in the food chain?

34. In what way is the biosphere considered a closed system? (pg. 2)

35. Briefly describe how our attitudes toward the environment have changed in the last fifty years. (pg. 14)

36. What was the “**AWAKENING PERIOD**” in environmental awareness? (pg. 14)

37. Distinguish between “**PRESERVATION ETHIC**” and “**CONSERVATION ETHIC.**” (pg. 16-17)

Preservation Ethic:
Conservation Ethic: