**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period: \_\_\_\_\_\_\_\_\_\_\_**

**This is the review packet for the Environmental Science 2nd Semester Final Exam.**

* **If you are taking the exam, this will count as bonus points on your final exam. It is ALL or NOTHING to receive credit. Answers MUST be written on a separate sheet of paper. Title and number each section as written below. Staple answers to the front of this sheet. NO EXCEPTIONS!**
* **If you plan to exempt your exam, these review sheets must be completed BEFORE I will sign your exemption form. Answers MUST be written on a separate sheet of paper. Title and number each section as written below. Staple answers to the front of this sheet. NO EXCEPTIONS!**

**Chapters 17/18**

1. How do oil and natural gas form (be specific!)?

2. Solar energy (energy from the sun) is stored mostly where (top of page 467)?

3. How does coal form?

4. What are the advantages and disadvantages of *nuclear energy*?

5. Compare and contrast *renewable* and *nonrenewable* energy.

6. Give examples of *renewable* and *nonrenewable* energy sources.

7. How does a *geothermal power* *plant* get energy?

8. What are the advantages and disadvantages of *wind energy*?

**Chapter 19**

9. In developing countries, for what purposes is *biomass fuel* mostly used?

10. What percent of energy is saved by *recycling* aluminum cans?

11. Compare and contrast the different types of *degradable plastics*. Give examples.

12. Describe the process of *deep-well injection*.

13. What is *source reduction*? Give an example.

14. Describe the *Superfund Act* and *Resource Conservation and Recovery Act.*

15. What are two major problems with using landfills?

**Chapter 20**

16. List three sources of *natural pollution*.

17. What is a *cross-species transfer*? Give examples.

18. How are most of the diseases in the world spread (air, water, soil, or people)?

19. Define *toxicology*.

20. What is an *epidemiologist*? Which questions to epidemiologists ask?

21. When/how do naturally occurring pollutants become harmful?

22. Which pollutants are added to the air by burning vehicle fuel?

23. What is a risk assessment? Why/when/how is one used?

**Chapter 4**

24. What is the ultimate source of energy in most ecosystems?

25. Define *species*. Give an example.

26. Define *community*. Give an example.

27. What makes one organism more likely to survive than another (page 102)?

28. In order for evolution in a population to occur, the organisms must \_\_\_\_\_\_\_\_\_\_\_\_.

29. List, describe, and give examples of the *six kingdoms of life*.

30. Organisms in which kingdom are involved in *nitrogen fixation*?

31. What is an *angiosperm*? Why do most land animals need angiosperms?

32. Define *biotic* and *abiotic* factors. Give examples of each.

33. Bacteria, fungi, and plants share which characteristic(s)?

**Chapter 5**

34. Compare and contrast *producers, herbivores, omnivores, carnivores, and decomposers.*

Give examples of each*.*

35. What is the *10% rule*?

36. What role to plants play in the *carbon cycle*?

37. Compare and contrast *primary* and *secondary succession.* Give examples of each.

38. What is a *food chain*?

39. What is a *food web*?

40. What do the arrows in a food chain or web represent?

**Chapter 6**

41. Describe the plants and animals that live in the *savanna*.

42. What are the major characteristics of the *tropical rain forest*?

43. What adaptations do animals that live in the *desert* have?

44. List the major characteristics of the *tundra*.

45. Describe the *Taiga*.

46. How are biomes usually described or defined?

47. Which adaptations do plants in the *tropical rain forest* have?

48. Know how the different biomes are distributed around the world.

49. Compare and contrast *latitude* and *altitude*.

50. Which major factors determine which types of plants grow in a biome?

51. Biomes with high temperatures and low amounts of precipitation would have which

types of vegetation?

**Chapter 7**

52. What are the environmental functions of *wetlands*?

53. Describe the characteristics of an *estuary*.

54. What is the cause of most coastal pollution in the United States?

55. Describe how to flow of a river changes as it moves from mountain to flatter ground.

56. What determines the types of organisms found in a lake or pond?

57. Describe the following aquatic zones: *benthic, littoral*

58. Which organism produces the most food in most aquatic ecosystems?

59. What determines the arraignment of organisms in an aquatic ecosystem?

60. How do *coral reefs* form?

61. Which aquatic ecosystem has the highest concentration of salt?

**Chapter 8**

62. Define *population*.

63. Define *density*.

64. Compare and contrast the three types of symbiosis (parasitism, mutualism,

commensalism). Give examples of each.

65. What is meant by *random dispersion*? Give an example.

66. Compare and contrast *density-independent* and *density-dependent* causes of death.

Give an example of each.

67. Define *carrying capacity*.