

CHAPTER 25--ENVIRONMENTAL WORLDVIEWS, ETHICS, AND SUSTAINABILITY

Student: _____

1. What was the major point learned in the 1991 Biosphere 2 experiment?
 - A. How to recycle waste and wastewater.
 - B. How to grow a rainforest in an enclosed area.
 - C. CO₂ recycling is really difficult.
 - D. Humans cannot engineer life-supporting systems as well as nature.
 - E. Extinction is inevitable.
2. Which of the following is *not* a part of the Planetary Management worldview?
 - A. We are the most important and dominant species.
 - B. Resources are limited and should not be wasted.
 - C. The earth should be managed for our own benefit.
 - D. The potential for economic growth is essentially unlimited.
 - E. Success depends on managing life-support systems to our benefit.
3. Which of the following is synonymous with an anthropocentric worldview?
 - A. self-centered
 - B. life-centered
 - C. human-centered
 - D. ecosystem-centered
 - E. earth-centered
4. Which of the following understands the earth to be a complex machine that we can understand, dominate, change, and manage for everyone's good without overloading natural systems?
 - A. spaceship-earth
 - B. planetary management
 - C. deep ecology
 - D. biocentric
 - E. stewardship
5. Which of the following is based on a belief that the less government interference the better?
 - A. no-problem school
 - B. free-market school
 - C. spaceship-earth school
 - D. stewardship
 - E. ecocentrism

6. Which of the following is *not* a human-centered worldview?
- A. stewardship
 - B. planetary Management
 - C. free-market school
 - D. spaceship-earth
 - E. environmental wisdom
7. Which of the following is part of the environmental wisdom worldview?
- A. Success is managing the earth's systems for ourselves.
 - B. Success is managing the earth by dominating, changing, and managing the earth for everyone.
 - C. Success is economic growth, development, better management, and technology.
 - D. Success is learning how nature sustains itself and integrating this into our actions.
 - E. Success is understanding nature to dominate, change, and manage it.
8. Which of the following ideas would *not* be part of the earth-oriented worldview?
- A. Preserving the earth's biodiversity now and in the future
 - B. Humans are not in charge of the world
 - C. We have an ethical responsibility to be caring, responsible managers of the earth.
 - D. Human economies and systems are part of earth's life-support systems
 - E. Preventing depletion of natural capital promotes environmental sustainability
9. Which of the following believes we can solve any environmental, population, or resource problem with more economic growth and development, better management, and better technology?
- A. no-problem school
 - B. human centered
 - C. environmental wisdom
 - D. free-market
 - E. planetary management
10. Some critics think one of the following worldviews will not work because it is based on increased degradation and depletion of the earth's capital, and it focuses on short-term economic benefits with little regard for long term harmful consequences. Which worldview does this best represent?
- A. no-problem school
 - B. human centered
 - C. environmental wisdom
 - D. free-market
 - E. planetary management

11. Which of the following worldviews would include the concept that when we use the earth's natural capital we are borrowing from the earth and from future generations?
- A. planetary management
 - B. stewardship
 - C. free-market school
 - D. spaceship-earth
 - E. environmental wisdom
12. Which of the following would *not* be part of the environmental wisdom worldview?
- A. Human ingenuity and technology will not allow us to run out of resources.
 - B. We should encourage earth-sustaining forms of economic growth.
 - C. Resources are limited and should not be wasted.
 - D. Nature exists for all species and we are totally dependent on nature.
 - E. Our success depends on learning how nature sustains itself.
13. Part of the problem in the human degradation of the life-support system of the earth is our ignorance of how the earth works. To change our behavior we need to know
- A. Natural capital matters because it supports the earth's life and our economics.
 - B. Our ecological footprints are immense and expanding rapidly
 - C. Ecological and climate change tipping points are irreversible and should never be crossed.
 - D. All of these.
 - E. None of these.
14. Which of the following is *not* one of the ethical guidelines for living more sustainably?
- A. Do not degrade or deplete the earth's natural capital.
 - B. Help maintain the earth's capacity for self-repair.
 - C. Do not waste matter and energy resources.
 - D. Avoid climate-changing activities.
 - E. Encourage more technological answers to problems.
15. Which of the following is *not* one of the human activities having the greatest harmful impact on the environment?
- A. food production
 - B. transportation
 - C. home energy use
 - D. recycling
 - E. overall resource use

16. Which of the following would not be one of the components of an environmental revolution?
- A. deemphasis of population controls
 - B. biodiversity protection
 - C. energy transformation
 - D. emphasis on sufficiency
 - E. commitment to eco-efficiency
17. According to social science research, in order for a major social change to occur, what percentage of the people need to be convinced that change must take place?
- A. 100%
 - B. 50%
 - C. 33%
 - D. 20%
 - E. 5-10%
18. Voluntary simplicity, a growing movement in the developed world, would include all of the following except?
- A. learning to live with much less
 - B. working less to spend more time with family
 - C. using products with smaller environmental impact
 - D. adding more possessions that last longer
 - E. none of these
19. The Biosphere 2 experiment was a complete success.
- True False
20. The no-problem school worldview is part of the environmental wisdom worldview.
- True False
21. People with earth-centered worldviews believe that humans are in charge of the world and that the earth's life support systems are subservient to human demands.
- True False
22. The spaceship-earth worldview understands the earth as a complex machine that we can dominate, change, and manage.
- True False
23. Most people with a life-centered worldview believe we have an ethical responsibility to avoid causing the premature extinction of species.
- True False

24. The environmental wisdom worldview believes we should talk about saving the earth because the earth is in need of saving.
- True False
25. Those who adhere to the free-market worldview suggest that all public property resources should be converted to private property resources.
- True False
26. Once an environmental or climate change tipping point is reached, there is no going back and neither money nor technology will save us from the consequences.
- True False
27. Humans now have more technology and power to degrade nature than ever before. At the same time we have very little contact with, or understanding of, nature.
- True False
28. Having a sense of connectedness with nature is not all that important to dealing with environmental problems.
- True False
29. An earth-centered worldview is more practical than a human-centered worldview.
- True False
30. Evidence indicates that human driven degradation of nature will likely threaten human civilization, and one-half of all the world's species in this century.
- True False
31. There is widespread evidence that humans are increasingly degrading our own life-support system.
- True False
32. A formal environmental education is important, but it is not enough to solve the problems with the degradation of nature.
- True False
33. Research by psychologists have found that a growing number of people want more of a sense of community as opposed to more 'stuff.'
- True False

34. Technological fixes, such as being more efficient in resource use, have been able to keep up with expansion of global resource use.

True False

35. In order to make change in the world around environmental issues, we need to convince at least one-half of the world's people.

True False

36. History indicates we can change faster than may be thought, once we have courage to leave behind ideas and practices that no longer work.

True False

37. The Biosphere 2 experiment failed to maintain _____ for eight people for two years.

38. An _____ is how people think the world works and what they believe their role in it should be.

39. In the planetary management worldview, the potential for economic growth is

_____.

40. The stewardship worldview holds that as we use natural capital we are _____ from future generations.

41. The _____ worldview is devoted to preserving the earth's biodiversity and life systems for now and in the future.

42. The _____ worldview suggests humans are separate from the rest of nature and can manage nature to meet our increasing needs and wants.

43. The concept that we have an ethical responsibility to be caring and responsible managers of the earth is associated with the _____ worldview.

44. Our ecological footprints _____ the earth's estimated ecological capacity.

45. Earth-focused philosophers say that to be rooted, each of us needs to find a(n)
_____.

46. Some affluent people in more-developed countries have adopted a lifestyle of _____ ,
in which they seek to live with much less than they are accustomed to having.

47. Some analysts suggest that for some people acquiring more and more goods should be treated as an
_____.

48. Environmental leaders say it is time for an _____ to change the way we treat the
earth.

49. Research suggests we need only convince _____ % of the people in a country or in the
world to bring about major social change.

50. The Biosphere 2 experiment could be seen as a failure, or it could be seen as an affirmation that nature is
exceedingly complex and should not be degraded or destroyed.

Which way do you view Biosphere 2? Explain your answer.

51. Examine the various worldviews as outlined in this section of the chapter. Which of these worldviews encompasses your understanding of how the world works? Is being aware of your worldview a helpful insight? Why or why not.
52. According to the environmental wisdom worldview, “all efforts to promote sustainability are local and personal.” How do you understand this concept? Do you think all sustainability efforts are local and personal, or national/global and impersonal. Explain.
53. What does "*a sense of place*" mean? Do you have such a place, and if so, where is it? Do you think a sense of place is important? What would you do to protect that place?

54. Consider the section "How Much Is Enough?" Do you agree that many of the things we now feel are necessities are actually luxuries? Could you do without them, or are they now part of your necessities? How does your worldview affect your sense of what is necessary?
55. Some analysts suggest the need to continually acquire "more and more goods" should be treated as an addiction. Do you agree? What difference would it make if we did treat it as an addiction? Is this an addiction that we would be willing to work on?

CHAPTER 25--ENVIRONMENTAL WORLDVIEWS, ETHICS, AND SUSTAINABILITY **Key**

1. D
2. B
3. C
4. A
5. B
6. E
7. D
8. C
9. A
10. D
11. B
12. A
13. D
14. E
15. D
16. A
17. E
18. D
19. FALSE
20. FALSE
21. FALSE
22. TRUE
23. TRUE
24. FALSE
25. TRUE
26. TRUE
27. TRUE
28. FALSE
29. TRUE

30. TRUE
31. TRUE
32. TRUE
33. TRUE
34. FALSE
35. FALSE
36. TRUE
37. life-support systems
38. environmental worldview
39. unlimited
40. borrowing
41. earth-centered
42. planetary management
43. stewardship
44. exceed
45. sense of place
46. voluntary simplicity
47. addiction
48. environmental revolution *or* sustainability revolution
49. 5-10
50. The answer may take several directions. It should include some acknowledgement of unintended consequences, and the limits of our knowledge about how the environment works. The limitation of both our experience and knowledge of the complexity of systems this large may also play a part.
51. Whichever worldview is chosen should reflect an understanding of its basic tenets. Self-reflection is generally difficult for students to do. It would be useful for a student to reflect on how it might be used and what it means to bring such an insight to the table as discussion of these issues is engaged.
52. The environmental wisdom worldview believes humans are part of the "community of life and the ecological processes that sustain all life." Because we are part of this community, to sustain the community is to sustain ourselves, our civilizations, and our economies. As such we sustain ourselves. Students should reflect the integrated nature of humans with the rest of the community of life. Our success as a species is dependent, to a great part, on the success of the biosphere.
53. To identify a sense of place that is worth protecting is an important insight into understanding why we need to protect the larger environment. A brief discussion of "if" and "where" could open that discussion for the student. Most people have someplace they want to protect. The key will be for the student to make connections between his/her place and the larger environment as "place."
54. Most students are likely going to understand the list of "luxuries" (cars, televisions, cell phones, etc.) as truly necessities. The phrase from Gandhi on the previous page ("The earth provides enough to satisfy every person's need, but not every person's greed.") might prove an interesting foil for discussion. The person should engage the word "enough" in some fashion. If there is no limit to enough then the accumulation of things has no boundaries.
55. If the need to acquire more things came to be seen as addictive behavior the change might lead to an awareness in some persons of the destructiveness of the behavior. However, addictive behaviors, such as overeating, excessive alcohol use, and smoking, continue despite being viewed as destructive. The mindset that succeeding generations are supposed to be 'better off' than previous ones is deeply ingrained in US society. Ideally, students would reflect on the destructiveness of current behaviors and the potential effects on future generations.