

Student name: _____

1) To say that environmental science is mission oriented means it is

A) a highly organized endeavor.

B) essentially an information gathering endeavor.

C) oriented toward solving problems.

D) designed to understand relationships.

2) If everyone in the world lived a lifestyle similar to the average U.S. citizen we would need _____ more planets to support everyone.

A) two

B) four

C) six

D) eight

3) About _____ of the world's people currently lack access to clean water, adequate diet, basic sanitation, and other essential needs.

A) 100 million

B) 300 million

C) 700 million

D) 1.4 billion

4) Sustainable development means

A) improving people's lives in the present in a way that can continue far into the future.

B) providing ever-increasing amounts of adequate housing.

C) continued growth indefinitely as long as it can be

paid off.

D) utilizing an ever-increasing quantity of natural resources.

A) George Perkins Marsh's 1864 publication of *Man and Nature*.

B) Rachel Carson's *Silent Spring*, alerting the public to the dangers of pollution in 1962.

C) Roosevelt's warnings about overuse a century ago.

D) Plato's writings 2500 years ago.

6) Which of the following presently provides 80 percent of the energy used in industrialized countries?

A) Fossil fuels

B) Wind

C) Hydroelectric power

D) Solar

7) The position that nature deserves to be protected in its own right is called

A) biocentric preservation.

B) utilitarian conservation.

C) environmentalism.

D) global environmentalism.

8) _____ constitutes 4.6 percent of the world's people yet produces about 50 percent of all toxic waste.

A) China

B) Germany

C) Russia

D) The United States

9) By 2050, the earth is projected to have a population between

- A) 8 and 10 billion.
- B) 7 and 8 billion.

- C) 8 and 9 billion.
- D) 10 and 12 billion.

10) The first Nobel Prize for environmental action was awarded

- A) in 1912 to John Muir.
- B) in 1973 to David Brower.
- C) in 2004 to Wangari Maathai.

- D) in 1935 to Aldo Leopold.

11) There is concern over the continued ability to provide adequate food for our growing population because

- A) 2/3 of all agricultural lands show signs of degradation.
- B) there is little corporate interest in food production.
- C) agriculture has not benefited from modern

technological advancements.

- D) there is little knowledge about how to farm.

12) Critics of sustainable development suggest that we are limited by

- A) non-renewable resources.
- B) the capacity of the biosphere to absorb waste.
- C) newly developed renewable technologies.

- D) non-renewable resources and the capacity of the biosphere to absorb waste.

13) The word "environment" comes from a French word that means

- A) life

- B) nature
- C) wildlife

- D) home
- E) to surround

14) Environmental science is a _____.

- A) Narrowly defined set of physical, life, and social sciences
- B) Theoretical approach in interpreting the environment
- C) Way to see the world in scientific terms

- D) Systematic approach in learning about the environment
- E) Special set of problem-solving skills

15) Most environmental problems result from

- A) Political differences
- B) Complex, interrelated problems
- C) Technological development problems

- D) Global warming
- E) Urban degradation

16) The word *environment* as used in environmental science does not include

- A) our culture.
- B) the biosphere.
- C) our political system.
- D) solutions to problems.

- E) understanding relationships between organisms.

17) The fundamental basis of environmental science as a discipline is the

- A) History of the use of natural resources

- B) Diversity of life on the Earth

- C) Human impact on the Earth
- D) Pollution on the Earth

E) Future use of natural resources

18) Which of the following areas does environmental science **NOT** draw information from to aid in solving problems?

- A) Political Science
- B) Chemistry
- C) Ecology

D) Sociology
E) Music and the Arts

19) One major difference affecting the scope of environmental issues of the past and present is the

- A) Current ability to alter the natural world through technology
- B) Relatively new emergence of environmentalists
- C) Historical ignorance of the interconnected nature of environmental issues
- D) Development of new fields such as environmental

science
E) Extremely fast transmission of information through the Internet

20) In the fourth century B.C., the philosopher Plato wrote of the erosion and deforestation that _____ Greece.

- A) Would one day plague
- B) Were caused by the excessive population in
- C) Were prevalent in countries outside of
- D) Had been a problem that was now resolved in

E) Had stripped the fine soils and forests of

21) Which of the following is **NOT** a problem being addressed by environmental scientists?

A) Finding

resources for a human population growing at almost 80 million people a year.

- B) Providing clean drinking water.
- C) Assessing and finding solutions to climate change.
- D) Creating processes that promote sustainability in

everyday life.

- E) Creating a better transportation system for food distribution to the populace.

22) A(n) _____ is a tabulation of the demands placed on nature by individuals or nations.

- A) ecological footprint
- B) quantitative analysis value
- C) world biocapacity

- D) land area resource ratio

23) Most of the early scientific studies of environmental damage were done by

- A) Colonial administrators who were often trained scientists
- B) Native people of North America
- C) European peasant farmers who understood the connection between deforestation and local climate change
- D) Industrial leaders of the nineteenth century who were worried about the degradation caused by factories

- E) Scientists in Europe who were worried about deforestation and erosion in their countries

24) The history of conservation and environmentalism is

- A) Based in the Industrial Revolution
- B) Largely unrecorded
- C) A relatively new movement
- D) Based in the 1970s environmental movement

- E) Traceable well back into human history

25) Mauritius, an island in the Indian Ocean, is a

model for balancing nature and human needs because in the eighteenth century a French governor

- A) Declared the island a nature sanctuary
- B) Ordered sensitive areas such as steep slopes to be preserved in forests
- C) Bought the island as a private sanctuary for the government of France
- D) Supported an extensive environmental education

campaign

- E) Enforced strict punishment for people who damaged any natural resources

26) Pragmatic conservationists, including Gifford Pinchot and Theodore Roosevelt, supported forest conservation in order to protect

- A) Wildlife habitats in forested areas
- B) Untouched, unvisited wilderness areas
- C) Jobs and homes for people
- D) The scenic beauty found in natural areas

- E) Resources such as natural habitats for future generations

27) Utilitarian conservationists tend to believe that resources should be saved because they are important

- A) As a home for wildlife
- B) In the conservation of aesthetic values
- C) To our understanding of the biosphere

- D) For a strong economic system

- E) And used by all living things

28) The approach that reflects the philosophy that there is waste in neglecting the development and use of certain natural resources (such as dead trees in old growth forests) would best be described as

- A) Moral and aesthetic preservation
- B) Global environmental citizenship

- C) Pragmaticutilitarian conservation

D) A cornucopian worldview

29) Biocentric preservationists, first led by John Muir, advocate saving natural areas for their

- A) Aesthetic and spiritual values and wildlife habitat
- B) Hunting and fishing value
- C) Wood and mineral resources for the future

- D) Tourism and recreation potential
- E) Economic value in cleaning the air and preventing soil erosion

30) Biocentric preservation is a philosophy that supports the belief that

- A) The biosphere is a central resource for humans
- B) Humans must manage resources for maximum productivity
- C) Preservation of wildlife is needed for human survival
- D) All living things have a fundamental right to exist

and pursue their own interests

- E) All living things have value for humans

31) The National Park Service reflects a _____ approach while the Forest Service reflects a _____ approach.

- A) Biocentric preservationist; pragmatic utilitarian conservationist
- B) Global environmentalist; cornucopian
- C) Pragmatic resource conservationist; moral and aesthetic preservationist

- D) Cornucopian; global environmentalist
- E) Pragmatic utilitarian conservation; biocentric preservation

32) Pollution problems

- A) Are relatively new concerns
- B) Identify the era of global environmentalism

- C) Were

recognized at least as early as the eleventh century

D) Are the main issues for technological optimists

33) Environmentalism stemming from the publication of Rachel Carson's *Silent Spring* differed from earlier North

American conservation perspectives by

- A) Focusing on human population growth
- B) Placing more emphasis on pollution problems
- C) Emphasizing international problems
- D) Encouraging energy efficiency

E) Emphasizing the value of natural resources

34) Modern environmentalism is becoming well established in the United States. One of the main reasons for this is probably the _____ in the modern movement.

- A) emphasis on technological remedies
- B) interconnected nature of our global village
- C) combination of activism and research
- D) emphasis on impending doom

E) greatly expanded international communications

35) At the end of the twentieth century, _____ has/have been added to environmental thinking.

- A) Global concerns
- B) Urban problems
- C) Water supply and pollution problems

D) Human population growth
E) Air pollution problems

36) Some of today's leading environmental thinkers, such as Dr. Wangari Maathai of Kenya

- A) Have denounced the use of technology
- B) Have shown that a slight decrease in human welfare must accompany environmental protection
- C) Have focused only on local environmental issues

D) Are

linking improved environmental quality with social progress

E) Treat humans as an entity separate from the environment in which they live

37) The world's population is now more than

- A) 70 million
- B) 70 billion
- C) 7 billion
- D) 700 million
- E) 20 million

38) Which country uses the most coal to produce electricity?

- A) China
- B) India
- C) United States
- D) Russia

39) Supplies of fossil fuels are

- A) Continually expanding in nature
- B) Being renewed as fast as we use them
- C) Being steadily depleted
- D) Almost entirely depleted
- E) Easily found through better technology

40) Which of the following factors will not lead to violent conflicts?

- A) Racial antagonisms
- B) Access to water
- C) Natural resource degradation
- D) Religious conflicts
- E) All of these are factors that can lead to violent conflicts

41) According to the U.N. Environment Programme how many species have gone extinct in the past century?

- A) Almost 100
- B) Over 250
- C) 563

D) More than 800

E) Nearly 1,700

42) The United Nations estimates that at least 3 million people die each year from diseases triggered by

A) water pollution.

B) air pollution.

C) exposure to radiation.

D) cigarette smoking.

E) mosquito-borne illnesses.

43) Evidence of progress in reducing overpopulation and the increased strain on the environment it causes is best illustrated by

A) The current evidence of a stable population in the developing and developed world

B) A decrease in the average number of children born to each woman

C) The current evidence of a globally stable population growth

D) The decreasing population growth rate in the United States

E) The current evidence of a stable population in the developing world

44) If everybody in the world used resources at the rate that people in the United States do,

A) People would be healthier and happier worldwide

B) Our current resources would run out quickly

C) Violent conflicts would decrease because basic needs would be met

D) Economies would prosper

E) More people would experience health problems because people in more prosperous countries experience more stress

- A) Decrease consumption rates
- B) Increase consumption rates
- C) Increase the development in the region
- D) Reduce the size of a biologically productive area

in the region

E) None of these;
it is not possible to change
the size of an ecological
footprint

46) The world's poorest people typically
_____ environmental degradation.

- A) Cause the most
- B) Are victims and causes of
- C) Are unaffected by

D) Don't really
care about
E) Are ignorant of

47) Poverty is usually passed on from one generation to
the next through

- A) The lack of available opportunities
- B) Genetic conditions
- C) Improper care of natural resources

D) Illnesses
spread by viruses

48) In general, as per capita GDP (gross domestic product)
rises both _____ and _____ increase.

- A) infant mortality; life expectancy
- B) percentage of safe drinking water; rate of
infectious diseases
- C) infant mortality; adult literacy
- D) percentage of safe drinking water; adult literacy

E) total fertility
rate; percentage of safe
drinking water

49) Which country listed is not in the top 5 with respect to
sustainable development?

- A) The United States
- B) Sweden
- C) Finland

- D) New Zealand
- E) They are all in the top 5

50) Proponents of sustainable development argue that

- A) All development has environmental costs
- B) Development is less important than the environment
- C) Development can proceed with minimal costs to the environment
- D) The environment is less important than

- development
- E) Development does not cause environmental damage

51) Sustainable development, ideally, improves living conditions

- A) For a few decades into the future
- B) For the entire current political administration
- C) As long as resources last

- D) For generations in the future
- E) For the present generation

52) Sustainable development differs from traditional economic development in that it emphasizes economic development in the

- A) Short term
- B) Long term
- C) Present

- D) Past
- E) Present and past

53) Which of the following is **NOT** an ecosystem service?

- A) Providing fuel to burn
- B) High biodiversity
- C) Water purification

- D) Production of food
- E) Decomposition of waste

54) The branch of philosophy concerned with the distinction between right and wrong and the ultimate worth of actions of things is

- A) Values
- B) Ethics
- C) Morals
- D) Attitudes
- E) Characters

55) Ethics should guide decisions made regarding

- A) Environmental issues
- B) Economic issues
- C) Development issues
- D) Social justice issues
- E) All of the above issues

56) The Mineral King Valley court case is important in environmental history because it was a case that argued for the

- A) Inherent value of trees, rocks, and wildlife
- B) Instrumental value of trees, rocks, and wildlife
- C) Status of moral agents for trees, rocks, and wildlife
- D) Sustainable development of the area
- E) Moral consideration of sentient things

57) Another word for "steward" is

- A) Organizer
- B) Caretaker

- C) Participant
- D) Consumer
- E) Leader

58) The idea of stewardship is that humans have a/the _____ the environment.

- A) Privilege of using
- B) Technology to shape
- C) Duty to care for

- D) Opportunity to degrade
- E) Responsibility to use resources in

59) Environmental justice can be seen as

- A) the power to make laws for a just society.
- B) an issue that is of special interest to the global community.
- C) teaching the values of the environment to improve living standards for people.

- D) a local issue central to the middle-class citizens in the United States.
- E) both a local and an international issue.

60) The issue that racial and ethnic minorities face unusually high exposure to environmental hazards is a central argument to

- A) Sustainable development
- B) Environmental justice
- C) Economic development

- D) Urban renewal
- E) Interpretive science

61) Lead poisoning in children is an example that exemplifies the problem of _____ for minority

children in the United States.

- A)

Environmental racism

- B) Inadequate nutrition
- C) Poverty
- D) Sanitary conditions

E) Inadequate healthcare

62) The term "toxic colonialism" has been used in describing

- A) Lax environmental regulations for toxic wastes
- B) The exportation of toxic wastes to poor communities
- C) Rulings that toxins must not be exported to wealthy nations

D) The high level of toxic waste production by wealthy nations

E) The high level of toxic pesticide use by wealthy nations

63) The human development index (HDI)

- A) uses multiple factors including health, education, and poverty to compare the development of countries.
- B) considers GDP per person as a measure of wealth of the country and its development.
- C) is a measurement of environmental degradation of a country.
- D) only considers resource use and income from

trade to describe development.

E) with a score of zero means no problems in health, education, or other quality of life indicators.

64) Protecting fisheries and regulating fishing to protect fish stocks would be a component of which sustainable development goal?

- A) Life below water
- B) Affordable and clean energy
- C) Industry, innovation, and infrastructure

D) Clean water and sanitation

E) Climate action

65) Which of the following is the best short description of the sustainable development goals?

A) A set of international goals to protect the environment and also promote a good and productive life for people

B) A set of international goals to protect the environment

C) A plan to increase the wealth of all people by increasing industry

D) A set of international goals focused on reversing climate change

E) A set of international goals to combat poverty, but not address the environment

66) Salt marshes along the coast serve as a nursery site for juvenile fish including those that are important to the fishing industry. It is a natural habitat where these fish can develop

A) an ecosystem service.

B) the tragedy of the commons.

C) sustainable development.

before they move out to the ocean habitats. The salt marsh in this example is

D) biodiversity.

E) throughput.

67) Your friend explains that she believes water in rivers should be protected from pollution because that is where many people get their drinking water. In this case, your friend

A) instrumental value

B) intrinsic value

C) moral value

assigns _____ to the rivers.

D) ethical value

E) moral extensionism

68) Which of the following is incorrect regarding quality of life indicators for the most-developed countries?

A) Lower carbon dioxide emissions per capita

B) Lower infant mortality

C) Lower total fertility

D) Higher life

expectancy

- E) Higher female secondary education

69) Which of the following is a correct pattern for environmental indicators?

- A) As wealth increases, greenhouse gas emissions increase.
- B) As wealth increases, water contamination increases.
- C) As wealth increases air pollution decreases.

D) As wealth increases air pollution is not a factor.

E) As wealth increases, the environment is less affected.

70) Sustainable development is most similar to

- A) utilitarian conservation.
- B) biocentric preservation.
- C) industrialization.

D) environmentalism.

E) economic development.

71) John Muir believed that nature had intrinsic value because it was part of God's creation not because it could be

useful to man. This is an example of

- A) biocentric preservation.
- B) utilitarian conservation.
- C) industrialization.

D) environmentalism.

E) economic development.

72) The text suggests there is not a strong connection between poverty and environmental degradation.

- Ⓐ true
- Ⓑ false

73) Most people agree that global climate change is not a real environmental threat.

- ☐ true
- ☐ false

74) Loss of indigenous cultures is accompanied by loss of unique understanding of nature.

- ☐ true
- ☐ false

75) An important reason for determining the size of a society's ecological footprint is to determine the sustainability of its lifestyle.

- ☐ true
- ☐ false

76) One of the earliest models for conservation in the United States was based on utilitarian conservation, for which nature was conserved not to protect biodiversity, but to provide jobs and resources.

- ☐ true
- ☐ false

77) The ecological footprint of countries like Madagascar and the United States are very similar.

- ☐ true

Answer Key

Understanding Our Environment

Test name: Chapter 01 Test Bank:

- 1) C
- 2) B
- 3) D
- 4) A
- 5) D
- 6) A
- 7) A
- 8) D
- 9) A
- 10) C
- 11) A
- 12) D
- 13) E
- 14) D
- 15) B
- 16) D
- 17) C
- 18) E

19) A

20) E

21) E

22) A

23) A

24) E

25) B

26) C

27) D

28) C

29) A

30) D

31) A

32) C

33) B

34) C

35) A

36) D

37) C

38) A

39) C

40) E

41) D

42) B

43) B

44) B

45) A

46) B

47) A

48) D

49) A

50) C

51) D

52) B

53) B

54) B

55) E

56) A

57) B

58) C

59) E

60) B

- 61) A
- 62) B
- 63) A
- 64) A
- 65) A
- 66) A
- 67) A
- 68) A
- 69) A
- 70) A
- 71) A
- 72) FALSE
- 73) FALSE
- 74) TRUE
- 75) TRUE
- 76) TRUE
- 77) FALSE