

***Environmental Science: Toward a Sustainable Future, 12e (Wright)***

**Chapter 1 Science and the Environment**

1) These three sectors account for 50% of all jobs worldwide.

- A) agriculture, forestry and fishing
- B) coal, petroleum and natural gas
- C) entertainment, agriculture and construction
- D) computer science, health care and construction

Answer: A

Diff: 2

LO: 1: The state of the planet

2) Increasing global demands for energy is

- A) increasing social stability in many countries, as people pull together to solve this challenge.
- B) forcing dramatic switches to nuclear and tidal power, which do not contribute to global climate change.
- C) renewing interests in preserving and protecting additional lands for conservation.
- D) increasing political attention to oil production and global climate change.

Answer: D

Diff: 2

LO: 1: The state of the planet

3) Which of the following is not a renewable resource?

- A) the sun beating down on a rain forest
- B) plants, such as bamboo and rice, growing in moist environments
- C) oil reserves, buried deep below the surface of the ground
- D) water flowing through a dam

Answer: C

Diff: 2

LO: 3: Three unifying themes

4) Rachel Carson's scientific credibility was due in major part to her

- A) political connections with the Nixon administration.
- B) key role in the establishment of the EPA.
- C) funding from the companies that produced and distributed DDT.
- D) meticulous documentation of the findings reported in her book.

Answer: D

Diff: 2

LO: 4: Moving toward a sustainable future

- 5) Rachel Carson's book *Silent Spring* showed that
- A) pesticides like DDT were ineffective in killing crop pests.
  - B) scientific expertise can help shape positive environmental policies.
  - C) industries producing harmful chemicals welcomed scientific evaluation of their environmental impact.
  - D) biodiversity could be increased with cautious use of DDT.

Answer: B

Diff: 2

LO: 4: Moving toward a sustainable future

- 6) Rachel Carson's impact on environmental policy change was aided by support from

- A) the American Medical Association.
- B) the EPA.
- C) industries producing DDT.
- D) public opinion.

Answer: D

Diff: 3

LO: 4: Moving toward a sustainable future

- 7) Rachel Carson was particularly critical of the use of DDT to

- A) control the spread of Dutch elm disease.
- B) eradicate mosquitoes in wetland areas.
- C) control pests in national parks.
- D) fertilize large areas of corn and soy crops.

Answer: A

Diff: 2

LO: 4: Moving toward a sustainable future

- 8) Since 1800, the human population has increased

- A) two times.
- B) twenty times.
- C) ten times.
- D) six times.

Answer: D

Diff: 3

LO: 1: The state of the planet

- 9) Since about 1985, the world population has increased by about

- A) 10%.
- B) 40%.
- C) 70%.
- D) 100%.

Answer: B

Diff: 2

LO: 1: The state of the planet

- 10) The current global human population in 2012 is more than
- A) 10 billion and is increasing at an annual rate of 5%.
  - B) 2.2 billion and is no longer growing.
  - C) 7.1 billion and is growing at a rate of 1.2%.
  - D) 13 billion and is decreasing at a rate of 3% in developing nations.

Answer: C

Diff: 2

LO: 1: The state of the planet

- 11) Most of the world population growth in the near future will be in

- A) Europe.
- B) North America.
- C) developing countries.
- D) developed countries.

Answer: C

Diff: 1

LO: 1: The state of the planet

- 12) If the Millennium Development Goals are achieved by 2015,
- A) at least 30 developing countries will move into the developed category.
  - B) more than 400 million people will be lifted out of extreme poverty.
  - C) the population of the world will stop increasing.
  - D) people in the developing world will all have basic medical coverage.

Answer: B

Diff: 1

LO: 1: The state of the planet

- 13) The economic gap between developing and industrialized countries may best be narrowed by

- A) the adoption of democratic forms of government in developing countries.
- B) industrialized countries increasing shipments of food supplies to developing countries.
- C) industrialized countries harvesting more natural resources in developing countries.
- D) stabilizing population growth in developing countries.

Answer: D

Diff: 2

LO: 1: The state of the planet

- 14) Which of the following ecosystem service degradations is not a major environmental concern for sustainable development?

- A) overfishing the oceans
- B) degrading agricultural soils
- C) depleting supplies of coal
- D) cutting forests faster than they can regrow

Answer: C

Diff: 1

LO: 1: The state of the planet

15) A new store is constructed in place of a farm field, leading to increased runoff into streams, that leads to mudslides in the surrounding region. This construction resulted in the loss of ecosystem capital, because it

- A) increased erosion in the region.
- B) decreased the amount of crops grown in the region.
- C) increased the number of cars traveling in the region, to and from the store.
- D) All of the above.

Answer: A

Diff: 2

LO: 1: The state of the planet

16) The "Environmentalists Paradox" is

- A) As human population decreases, ecosystem health also decreases.
- B) As human material prosperity increases, ecosystem health decreases.
- C) The more non-renewable resources we use, the more new resources we discover.
- D) As biodiversity decreases, ecosystem health increases.

Answer: B

Diff: 2

LO: 1: The state of the planet

17) World population growth over the past 500 years has most resembled the letter

- A) M.
- B) U.
- C) S.
- D) J.

Answer: D

Diff: 2

LO: 1: The state of the planet

18) Which one of the following ecosystem services has been enhanced most by human use?

- A) capture fisheries
- B) pollination
- C) crops
- D) wood fuel

Answer: C

Diff: 1

LO: 1: The state of the planet

19) The Millennium Ecosystem Assessment primarily characterized human impact on

- A) atmospheric carbon dioxide levels.
- B) degradation of the ozone layer.
- C) ecosystem services.
- D) plate tectonics.

Answer: C

Diff: 1

LO: 1: The state of the planet

20) The 2007 Assessment Report concluded that global climate change is caused at least in part by the

- A) human use of fossil fuels to generate electricity and power engines.
- B) human use of chlorofluorocarbons in refrigeration systems.
- C) harvesting of millions of acres of corn, wheat, and soybeans around the world every year.
- D) depletion of groundwater supplies.

Answer: A

Diff: 1

LO: 1: The state of the planet

21) Carbon dioxide in the atmosphere contributes to global warming by

- A) transmitting visible light and absorbing infrared radiation.
- B) transmitting infrared radiation and absorbing visible light.
- C) transmitting infrared radiation and visible light.
- D) absorbing infrared radiation and visible light.

Answer: A

Diff: 2

LO: 1: The state of the planet

22) If atmospheric carbon dioxide was eliminated from our atmosphere, we would expect that

- A) the Earth would cool considerably and photosynthesis would dramatically increase.
- B) the Earth would cool considerably and photosynthesis would dramatically decrease.
- C) the Earth would heat up considerably and photosynthesis would dramatically increase.
- D) the Earth would heat up considerably and photosynthesis would dramatically decrease.

Answer: B

Diff: 3

LO: 1: The state of the planet

23) Which of the following is a correlation that is causing widespread concern?

- A) As atmospheric oxygen levels decline, the ozone layer is being destroyed.
- B) As atmospheric carbon dioxide levels decline, the ozone layer is being destroyed.
- C) As levels of methane decline, average global temperatures are increasing.
- D) As levels of carbon dioxide increase, average global temperatures are increasing.

Answer: D

Diff: 2

LO: 1: The state of the planet

24) Which of the following relationships is most likely to occur if global climate change policies are not enacted soon?

A) The wealthiest nations will contribute most to global climate change, yet the poorest people of the world will suffer most.

B) The wealthiest nations will contribute most to global climate change, and they will in turn suffer the most.

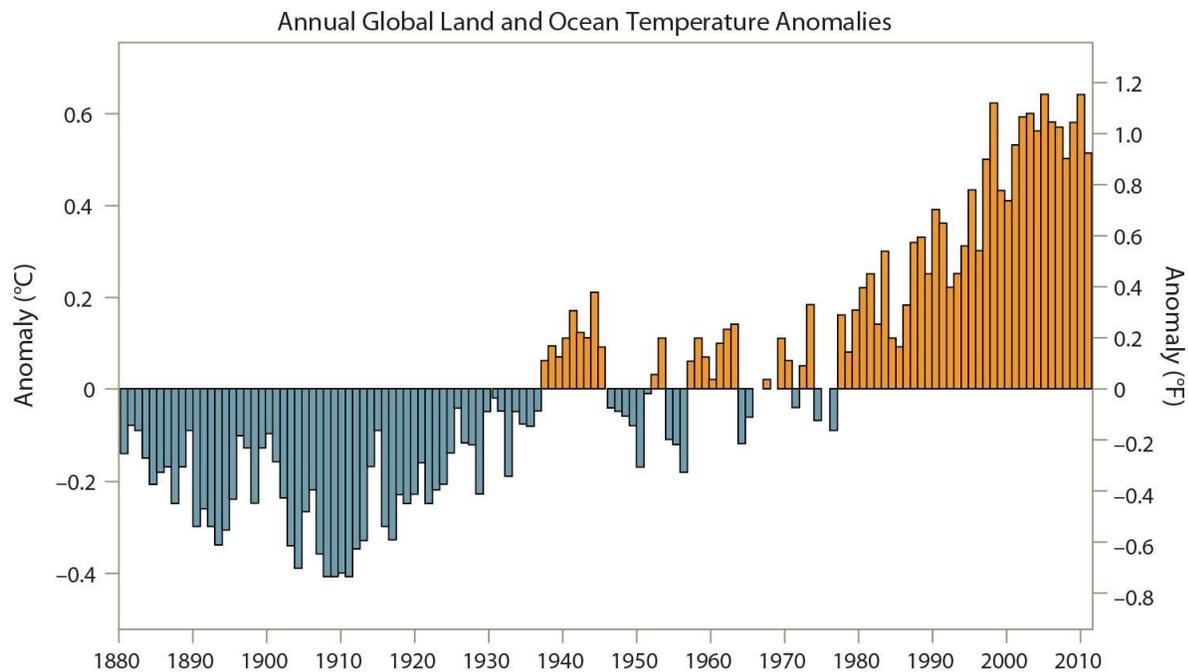
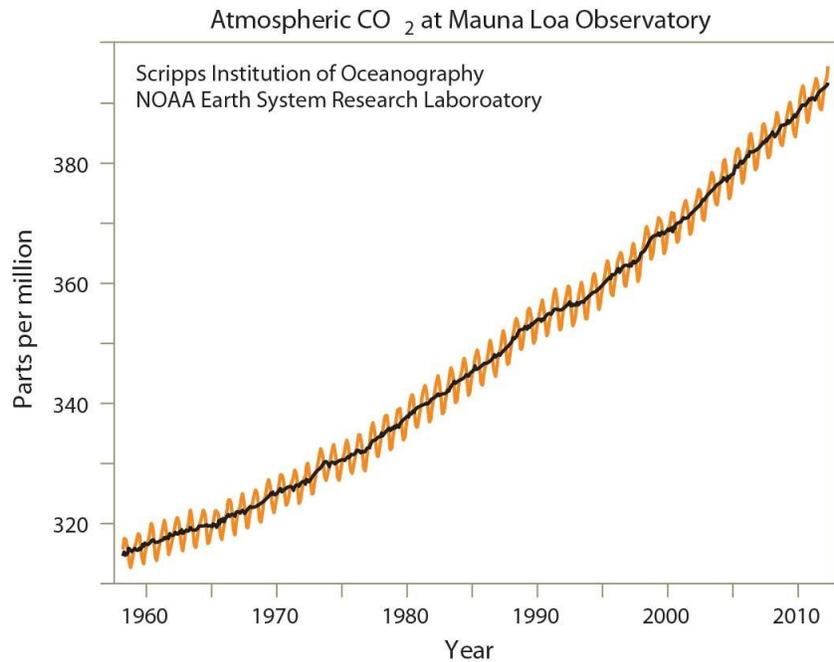
C) The poorest nations will contribute most to global climate change, yet the wealthiest nations will suffer most.

D) The poorest nations will contribute most to global climate change, and they in turn will suffer most.

Answer: A

Diff: 2

LO: 1: The state of the planet



25) Examine the historical changes in carbon dioxide levels and global temperatures in these figures. Although carbon dioxide levels have climbed steadily over the past 50 years, global temperatures for the same period have been more erratic, increasing and decreasing, yet climbing overall. Which is the most reasonable hypothesis explaining why global temperatures are more erratic than carbon dioxide levels?

- A) Carbon dioxide accumulates in the atmosphere while many factors affect global temperatures.
- B) Carbon dioxide steadily escapes from the atmosphere into space while global temperatures accumulate irregularly.
- C) Carbon dioxide levels are produced at an even rate while clouds may cool the Earth unevenly.

D) Carbon dioxide levels increase temperature until the heat destroys some of the carbon dioxide, lowering temperatures irregularly.

Answer: A

Diff: 3

LO: 1: A paradox: What is the real state of the planet?

26) Which of the following is an example of the greatest cause of biodiversity loss in the world today?

A) In the United States, the Army Corps of Engineers reroutes major rivers to improve the waterways for commercial navigation.

B) In Brazil, ranchers cut and burn rain forest to clear fields for grazing cattle.

C) In the United States, large fields once used to plant corn and soybeans are being converted for housing developments and commercial properties.

D) In northern Canada, native people continue to hunt seals and harvest fish from arctic seas.

Answer: B

Diff: 3

LO: 1: The state of the planet

27) In 2013 most species in the world go extinct because

A) of new diseases spread by human contact.

B) humans harvest them or kill them as pests.

C) of loss of habitat.

D) global climate change is causing their environments to rapidly change.

Answer: C

Diff: 1

LO: 1: The state of the planet

28) Biodiversity is important because

A) it is necessary to maintain stability of ecosystems.

B) humans can use new sources of food.

C) If certain species decline, photosynthesis may not be possible.

D) If certain species decline, there would be too much oxygen in the atmosphere.

Answer: A

Diff: 1

LO: 1: The state of the planet

29) The source of the acidity blamed for killing Oregon oyster larvae was

A) dissolved atmospheric carbon dioxide from fossil fuel combustion.

B) acidic runoff from nearby industries.

C) acidic precipitation from nearby coal-burning industries.

D) acids released by natural decomposition of organic wastes.

Answer: A

Diff: 2

LO: 1: The state of the planet

- 30) The destruction of oyster larvae in Oregon aquaculture tanks was discovered to be caused by
- A) pathogenic bacteria.
  - B) minute predators accidentally imported in sea water.
  - C) temperatures too warm for larval survival.
  - D) increase in the acidity of sea water in which the larvae were incubated.

Answer: D

Diff: 2

LO: 1: The state of the planet

- 31) Which of the following is the most inclusive example of the environment?
- A) a farmhouse, plowed fields, and a stand of old growth forest nearby
  - B) 50,000 people packed into a stadium to watch a football game
  - C) a remote region in Yellowstone National Park with access restricted to people
  - D) the student center building of a large university, busy with students at lunchtime

Answer: A

Diff: 2

LO: 2: Environmental science and the environmental movement

- 32) Which one of the following is least appropriate to the field of environmental science?  
Scientists

- A) determine the best fuel to generate electricity for a growing city in Arizona.
- B) help a rancher determine the best ways to rotate herds of cattle to reduce erosion.
- C) study X-ray emissions for evidence of black holes.
- D) at NASA launch satellites to monitor changes in carbon dioxide production on Earth.

Answer: C

Diff: 2

LO: 2: Environmental science and the environmental movement

- 33) Which of the following terms best applies to the practice of environmental science?
- A) highly specialized
  - B) integrative and interdisciplinary
  - C) abstract
  - D) theoretical

Answer: B

Diff: 3

LO: 2: Environmental science and the environmental movement

- 34) The census of 1890 highlighted the "closing of the frontier," which coincided with
- A) John Muir's conservation activities.
  - B) Rachel Carson's *Silent Spring*.
  - C) the greenbelt movement.
  - D) the Dust Bowl.

Answer: A

Diff: 2

LO: 2: Environmental science and the environmental movement

- 35) During the Great Depression, conservation
- A) was simply a luxury that could not be afforded.
  - B) efforts were opposed by millions of people who had no time to go to parks.
  - C) provided work and helped restore land.
  - D) was devalued as most national parks and national forests were harvested for timber and coal.

Answer: C

Diff: 1

LO: 2: Environmental science and the environmental movement

- 36) The greatest environmental problems of the 1950s mainly concerned
- A) increasing levels of ultraviolet radiation as the ozone layer was destroyed.
  - B) global climate change illustrated by the worldwide decline of thousands of glaciers.
  - C) widespread and easily detected water and air pollution.
  - D) thousands of nuclear power plants that spread radiation across the globe.

Answer: C

Diff: 2

LO: 2: Environmental science and the environmental movement

The Cuyahoga River in Ohio had been so polluted that it caught fire repeatedly from 1868-1969, including a 1952 fire that resulted in nearly \$1.5 million in damages. Amazingly, other rivers in the United States also caught fire during this period.

- 37) In 1962, Rachel Carson published her book *Silent Spring*. Seven years later, in 1969, the Cuyahoga River again caught fire and gained national attention. Based upon the concerns she expressed in *Silent Spring*, which of the following would have been her most likely reaction to learning of the 1969 Cuyahoga River fire?

- A) The river fires illustrate one of the many ways we are polluting our environment.
- B) If we used more solar photocells and windmills, this would not happen.
- C) The industries responsible should be investigated by the EPA.
- D) This is a perfect example of what happens when we use our rivers for transportation.

Answer: A

Diff: 3

LO: 2: Environmental science and the environmental movement

- 38) If rivers were catching fire today in 2012, what group would most likely be involved to investigate the situation and apply federal laws?

- A) Environmental Defense Fund
- B) Natural Resources Defense Council
- C) Union of Concerned Scientists
- D) Environmental Protection Agency

Answer: D

Diff: 2

LO: 2: Environmental science and the environmental movement

- 39) The environmental movement was a grassroots initiative that
- A) primarily addressed growing pollution of the environment.
  - B) has remained focused on issues related to renewable energy.
  - C) directly led to the green revolution.
  - D) has focused on efforts to control infectious diseases throughout the world.

Answer: A

Diff: 1

LO: 2: Environmental science and the environmental movement

- 40) Because of the modern environmental movement,
- A) world population has remained stable.
  - B) coal power plants are the main source of our electricity.
  - C) federal government is less involved in environmental policy.
  - D) average life expectancy for humans is longer.

Answer: D

Diff: 1

LO: 2: Environmental science and the environmental movement

- 41) Which of the following has been the most recent political response to efforts of the environmental movement?

- A) increased efforts for deregulation
- B) increased attention to sources of radiation
- C) increased reliance upon fossil fuels
- D) decreased reliance upon technology

Answer: A

Diff: 1

LO: 2: Environmental science and the environmental movement

- 42) Which of the following is true today?

- A) environmental policy debates are always politically divisive
- B) deregulation efforts typically leads toward more effective policy
- C) national elections rarely influence environmental policy
- D) environmental policy springs mostly from science and not election results

Answer: A

Diff: 1

LO: 2: Environmental science and the environmental movement

- 43) Which of the following best illustrates the spirit of stewardship?

- A) lobbying government officials to increase the drilling for offshore oil
- B) selecting a source of energy based upon the maximum yield of tax dollars
- C) converting automobiles from gasoline to natural gas as a new source of fuel
- D) promoting the recycling of paper and aluminum on university campuses

Answer: D

Diff: 2

LO: 3: Three unifying themes

44) Which of the following best illustrates sustainability?

- A) constructing coal mines that do not require extensive surface excavations
- B) increasing our reliance upon renewable sources of energy
- C) upgrading or replacing computers every few years to improve performance
- D) converting automobiles from gasoline to natural gas as a new source of fuel

Answer: B

Diff: 2

LO: 3: Three unifying themes

45) Which of the following best illustrates sound science?

- A) asking voters to determine if windmills should be placed in their community
- B) measuring wind velocities to determine the cost-effectiveness of windmills in a region
- C) selecting a source of energy based upon profitability and yield of tax dollars
- D) lobbying government officials to increase drilling for offshore oil

Answer: B

Diff: 2

LO: 3: Three unifying themes

46) Which one of the following terms least applies to science?

- A) profitable
- B) objective
- C) repeatable
- D) skepticism

Answer: A

Diff: 2

LO: 3: Three unifying themes

47) If seven students tell a zoologist that they saw Bigfoot while hiking in an Idaho forest the past weekend, an interested zoologist would most likely

- A) return to that region to look for evidence of a Bigfoot.
- B) report the students' experience in a scientific journal.
- C) conduct experiments to show that the students were probably mistaken.
- D) ask the students to explain how they felt during the encounter.

Answer: A

Diff: 3

LO: 3: Three unifying themes

48) Which of the following does not represent an important aspect of sound science? A scientist

- A) collects data and describes the characteristics of a particular type of lung cancer.
- B) attends a scientific meeting to reveal the effectiveness of a new lung cancer treatment.
- C) accepts funding from an industry and tries to generate data to support their products to treat lung cancer.
- D) conducts experiments to determine if a new drug is effective against a certain type of lung cancer.

Answer: C

Diff: 2

LO: 3: Three unifying themes

49) Thousands of cases of lung cancer occur in a two-year period in a city outside of Kentucky, at rates that are double that seen in other cities in the United States. Scientists working in that region assume that

- A) there is something peculiar to the region causing these unusually high rates.
- B) the medical reports from the area are incorrect.
- C) government policies and regulations are most likely the cause of this increase in cancer.
- D) this is most likely just an unlucky occurrence, like a baseball team that suffers through a losing streak.

Answer: A

Diff: 3

LO: 3: Three unifying themes

50) All scientific investigations are initially founded upon

- A) good observations.
- B) good experiments.
- C) multiple hypotheses, some of which are unanswerable.
- D) an already accepted theory.

Answer: A

Diff: 2

LO: 3: Three unifying themes

51) Which of the following best embodies the quality of a scientific theory?

- A) Squirrels in central Illinois prefer to build their nests in oak trees instead of hickory trees.
- B) All gases, liquids, and solids consist of atoms.
- C) Prairies that have large herds of bison show greater plant diversity than prairies without bison.
- D) Dangerous wildfires in California could be avoided by better fire prevention strategies.

Answer: B

Diff: 2

LO: 3: Three unifying themes



52) Examine the differences between the plant on the left and the plant on the right. Which of the following represents a scientifically acceptable hypothesis about these plants?

- A) The plant on the left is taller and has a much bushier root mass than the plant on the right.
- B) The plant on the left is 39.01mm taller and has 89.2% more needles than the plant on the right.
- C) Both plants were placed in the same greenhouse and received the same amount of sunlight and water.
- D) The plant on the left is taller and has more roots and needles because it has a root-fungus symbiosis missing on the plant on the right.

Answer: D

Diff: 2

LO: 3: Three unifying themes

53) Scientists investigating a drug to cure a disease in birds conducted experiments. In these experiments, what were the controls?

- A) birds that did not receive the drug being tested
- B) birds that received the drug being tested
- C) rats that were given the drug being tested
- D) birds given another drug that was not being tested

Answer: A

Diff: 1

LO: 3: Three unifying themes

## THE EXPERIMENT

Researchers wanted to determine if pesticide Z was effective at killing grasshoppers that typically invade cornfields. Two ten-acre cornfields located 1 mile apart were chosen. The cornfield to the west was sprayed only with water. The cornfield on the east received the same amount of water with a 10% solution of pesticide Z. Samples of the numbers of grasshoppers in the field were made every week for 10 weeks.

## RESULTS

West field treated only with water

The number of grasshoppers in the west field doubled after ten weeks.

East field treated with pesticide Z

The number of grasshoppers in the east field declined by 50% after 10 weeks.

54) What was the experimental variable in the above experiment?

- A) pesticide Z
- B) the number of grasshoppers receiving the pesticide
- C) the location of the fields
- D) the water sprayed on the fields

Answer: A

Diff: 1

LO: 3: Three unifying themes

55) Which field was the control group?

- A) the west field
- B) the east field
- C) Both fields were controls for one another.
- D) There were no controls in this experiment.

Answer: A

Diff: 1

LO: 3: Three unifying themes

56) Which of the following is the most accurate conclusion about these results?

- A) East fields are more likely than west fields to have problems with grasshoppers eating corn crops.
- B) If a cornfield is sprayed with pesticide Z, it will have fewer grasshoppers 10 weeks later.
- C) Pesticide Z is unable to kill grasshoppers and is not suitable for the use in modern agriculture.
- D) Pesticide Z is a good way to control most insect infestations on fields of corn, wheat, or oats.

Answer: B

Diff: 2

LO: 3: Three unifying themes

57) Some students on a biology field trip were sitting around watching honey bees. Some of the students noticed that bees spent more time on some flowers than on other flowers. As they talked about this behavior, the students offered various explanations. Some thought that the bees were avoiding predators on some flowers while other students suggested that some flowers may have sweeter nectar. These speculations about bee behavior are examples of

- A) data.
- B) bias.
- C) theories.
- D) hypotheses.

Answer: D

Diff: 2

LO: 3: Three unifying themes

58) The confidence in a scientific theory is most related to

- A) the number of grants received to study the subject.
- B) the reputation of the investigating scientists and their related universities.
- C) the amount of unbiased supporting evidence.
- D) the number of publications that discuss the subject in question.

Answer: C

Diff: 2

LO: 3: Three unifying themes

59) Every scientific observation and test has demonstrated that

- A) supernatural explanations should be included in our explanations.
- B) if theories are repeatedly tested, they can become hypotheses.
- C) the universe functions according to certain basic principles and laws.
- D) every scientific investigation requires the inclusion of proper control groups.

Answer: C

Diff: 2

LO: 3: Three unifying themes

60) The scientific peer-review process ensures that

- A) scientific studies have proper design and methods and are free from bias.
- B) all scientific studies receive publication despite the level of bias.
- C) the results of scientific studies are permanent and certain.
- D) all published scientific studies have clearly defined control groups.

Answer: A

Diff: 2

LO: 3: Three unifying themes

61) Excellent microscopes and telescopes are most commonly used to

- A) extend our senses.
- B) help control experimental environments.
- C) quickly measure great quantities.
- D) manipulate large quantities of materials.

Answer: A

Diff: 1

LO: 3: Three unifying themes

62) All instruments used in scientific investigations must be

- A) tested for accuracy.
- B) available to the public.
- C) composed of all new materials.
- D) designed for one particular function.

Answer: A

Diff: 1

LO: 3: Three unifying themes

63) Which of the following best illustrates bias in scientific investigations?

- A) Investigations of the cause of AIDS are limited by our inability to see viruses.
- B) Investigations of the health effects of smoking are funded and published by a tobacco company.
- C) Researchers studying heron nests notice that some baby herons fall out of nests and are killed.
- D) An experiment testing the effect of a new drug has only one control group.

Answer: B

Diff: 2

LO: 3: Three unifying themes

64) Subjective judgments about complex environmental phenomena often lead to

- A) the generation of new theories.
- B) the generation of new laws.
- C) controversies and unclear conclusions and public confusion.
- D) new legislation and government policies.

Answer: C

Diff: 1

LO: 3: Three unifying themes

65) Compared to sound science, junk science

- A) is anything that threatens or contradicts your point of view.
- B) is anything that confirms your point of view.
- C) does not conform to the established rigors of sound science.
- D) does not include bias or subjective values.

Answer: C

Diff: 2

LO: 3: Three unifying themes

66) Which of the following best illustrates the sustainable use of a resource?

- A) Coal mines in West Virginia remove the tops of mountains to extract large amounts of coal.
- B) Fishing industries improve their methods and now remove more than 90% of the fish in a region.
- C) Huge windmills in Texas are able to capture 50% of the wind energy in a specific region.
- D) Corporations are converting their company automobiles from gasoline to cheaper natural gas.

Answer: C

Diff: 2

LO: 3: Three unifying themes

67) Which one of the following sources of energy is most sustainable?

- A) natural gas used to heat homes
- B) gasoline used to run cars
- C) hydroelectric dams
- D) a coal-fired electrical power plant

Answer: C

Diff: 2

LO: 3: Three unifying themes

68) The concept of sustainable development includes

- A) the needs of future generations.
- B) growth in profits from international trade.
- C) the importance of developing the arts.
- D) the fastest ways to economic prosperity.

Answer: A

Diff: 2

LO: 3: Three unifying themes

69) Sustainable solutions should

- A) incorporate the concerns of economists, ecologists, and sociologists.
- B) emphasize ecology over all other fields.
- C) emphasize economics over all other fields.
- D) emphasize ecological and social issues over economic concerns.

Answer: A

Diff: 1

LO: 3: Three unifying themes

70) Which one of the following is least likely to be a product of a transition to a sustainable civilization?

- A) a stable human population
- B) increased reliance upon recycled materials
- C) larger cities with extensive suburbs
- D) greater reliance upon renewable energy resources

Answer: C

Diff: 1

LO: 3: Three unifying themes

71) The statement, "The Earth was not given to you by your parents, it was lent to you from your children" best reflects

- A) junk science.
- B) higher rates of consumption of non-renewable materials.
- C) stewardship.
- D) the need for a strong central or military government.

Answer: C

Diff: 3

LO: 3: Three unifying themes

72) The advice of Rachel Carson in her book *Silent Spring* reflects

- A) stewardship.
- B) an urgent need for sustainable use of petroleum.
- C) junk science.
- D) a plea for population control.

Answer: A

Diff: 1

LO: 3: Three unifying themes

73) In 1910, President Theodore Roosevelt said "I recognize the right and duty of this generation to develop and use the natural resources of our land; but I do not recognize the right to waste them, or to rob, by wasteful use, the generations that come after us." His message best reflects

- A) an argument for economic growth.
- B) a plea for good stewardship.
- C) an argument against sustainable agriculture.
- D) a philosophy in conflict with Rachel Carson's.

Answer: B

Diff: 2

LO: 3: Three unifying themes

74) A disproportionately high placement of toxic waste sites in regions of the United States populated by minorities presents an issue of

- A) urban "smart growth."
- B) environmental racism.
- C) sustainable development.
- D) a demographic transition.

Answer: B

Diff: 1

LO: 3: Three unifying themes

75) Discriminatory trade practices that favor industrialized countries over developing countries are

- A) rare and are gradually being eliminated.
- B) not issues of concern to environmental scientists.
- C) ways that industrialized countries support sustainable resource management.
- D) the number one issue at every meeting of the World Trade Organization.

Answer: D

Diff: 1

LO: 3: Three unifying themes

76) Which of the following has been most negatively impacted by globalization?

- A) the exchange of information
- B) agricultural practices
- C) public-health practices
- D) local cultures' religious and dietary traditions

Answer: D

Diff: 1

LO: 4: Moving toward a sustainable future

77) Globalization is largely the result of

- A) new forms of ground transportation.
- B) worldwide electronic communication.
- C) increased exploration into unpopulated regions of the world.
- D) major new discoveries of natural resources.

Answer: B

Diff: 2

LO: 4: Moving toward a sustainable future

78) The greatest impact of globalization is seen in the

- A) increased access of natural resources to poor developing nations.
- B) economic reorganization and interdependency of the world.
- C) move towards sustainable development throughout the world.
- D) general shift in populations from cities to rural life.

Answer: B

Diff: 2

LO: 4: Moving toward a sustainable future

79) Globalization has been most effective addressing which of the following problems?

- A) the dispersion of exotic species to new locations in the world
- B) the spread of infectious organisms
- C) the challenges of producing enough food for the people of the world
- D) global climate change

Answer: C

Diff: 1

LO: 4: Moving toward a sustainable future

- 80) In general, the movement toward sustainability is
- A) declining as interest in sustainable environmental policy declines.
  - B) still a distant philosophical goal of the environmental movement.
  - C) faced with growing opposition from economic interests.
  - D) growing with greater interest from governments and businesses.

Answer: D

Diff: 1

LO: 4: Moving toward a sustainable future

- 81) In the past, most Western ethics concerning our relationship to the natural environment have been based upon

- A) the utility of the environment to humans.
- B) conserving natural ecosystems without alteration.
- C) the aesthetic value of natural systems.
- D) reverence and respect for the spiritual aspects of the natural world.

Answer: A

Diff: 2

LO: 4: Moving toward a sustainable future

- 82) The investigation of the causes of the sudden death of larval oysters in Oregon reveals

- A) the dangers of the introduction of exotic species into remote locations.
- B) the importance of understanding the local ethics of a community.
- C) the role of sound science in addressing environmental issues.
- D) the dangers of sustainable environmental practices resulting from globalization.

Answer: C

Diff: 2

LO: 3: Three unifying principles

- 83) The lessons learned from Rachel Carson's *Silent Spring* reveal the importance of

- A) sustainability and stewardship.
- B) junk science and the influence of politics in government.
- C) global communication and equity in trade with other cultures.
- D) the need to establish more state and national parks.

Answer: A

Diff: 2

LO: 3: Three unifying themes