Add, modify, and remove questions. Select a question type from the Add Question drop-down list and click Go to add questions. Use Creation Settings to establish which default options, such as feedback and images, are available for question creation.

**Name**: Chapter 1--Environmental Problems, Their Causes, and Sustainability

**Instructions**

### Question 1

**Multiple Choice**

**Question**: The goal of environmental science includes

- understanding how we interact with the environment.
- finding ways to deal with environmental problems.
- all of the above.

**Answer**

- learning how nature works.
- finding ways to live more sustainably.
- all of the above.

### Question 2

**Multiple Choice**

**Question**: The three principles of sustainability are

- reliance on solar energy, biological diversity and nutrient cycling.
- environmentalism, ecosystems, and solar energy.
- nutrient cycling, water resources, and environmentalism.
- solar energy, ecosystems, and natural capital.

**Answer**

- environmentalism, ecosystems, and solar energy.
- nutrient cycling, water resources, and environmentalism.
- solar energy, ecosystems, and natural capital.

### Question 3

**Multiple Choice**

**Question**: Meeting current and future basic resource needs without compromising future generation’s basic needs is considered a(n)

- environmental sustainable society.
- natural capital degradation.
- trade-offs.
- scientific solutions.

**Answer**

- environmental sustainable society.
- natural capital degradation.
- scientific solutions.
- trade-offs.

### Question 4

**Multiple Choice**

**Question**: Which of the following does not describe a sustainable society?

- lives off of income without depleting its natural capital.
- manages its economy and population size without exceeding the carrying capacity of the environment.
- protects the prospects of future generations of humans and other species.
- utilizes nonrenewable resources for maximum benefit of the current generation.

**Answer**

- utilizes nonrenewable resources for maximum benefit of the current generation.
- protects the prospects of future generations of humans and other species.
- manages its economy and population size without exceeding the carrying capacity of the environment.
- lives off of income without depleting its natural capital.

### Question 5

**Multiple Choice**

**Question**: Use of a natural resource based on sustainable yield applies to

- renewable resources.
- nonrenewable resources.
- amenity resources.
- perpetual resources.

**Answer**

- renewable resources.
- nonrenewable resources.
- amenity resources.
- perpetual resources.

### Question 6

**Multiple Choice**

**Question**: On the outskirts of a municipality lies a forest on public property. A person applying sustainable resource-use principles might suggest

- clear-cutting the forest to provide taxes for the town.
- harvesting trees at their estimated sustainable yield.
- none of these answers.

**Answer**

- harvesting trees at their estimated sustainable yield.
- clear-cutting the forest to provide taxes for the town.
- none of these answers.

### Question 7

**Multiple Choice**

**Question**: All of the following are potentially renewable resources except

- ground water.
- trees in a forest.
- fertile soil.
- crude oil.

**Answer**

- crude oil.
- ground water.
- trees in a forest.
- fertile soil.
Resources that are called nonrenewable are also called perpetual resources. The only resources that are alive, capable of depletion, derived from solar capital, none of these answers.

Which is the least effective way to extend the use of nonrenewable resources?
- reducing direct consumption of the resource
- reusing the same form of a particular resource many times
- recycling a resource into new products
- finding substitutes for a resource
- reducing the efficiency of resource use

Which of the following is an example of recycling?
- collecting and remelting aluminum beer cans
- cleaning and refilling soft-drink bottles
- selling used clothing at a garage sale
- saving leftovers in a peanut butter jar
- donating furniture to a charity

As part of the path to sustainability, tradeoffs most specifically refer to:
- trading environmental quality for economic growth.
- trading quality of life issues for ecological enhancements.
- resolving conflicts through compromise.
- solving environmental conflicts.
- recognizing that human activities degrade natural capital.

Gross Domestic Product (GDP) measures:
- death rates.
- economic growth.
- economic development.
- wealth of developing countries.
- wealth of developed countries.

Which of the following statements about developing countries is true?
- They are highly industrialized.
- They have high average GNPs per person.
- The United States, Canada, and Japan are developing countries.
- Most of the projected increase in the world's population is expected to take place there.
- Their populations are projected to dwindling.

Point sources of pollution include all of the following except:
- an automobile tailpipe.
- a factory smokestack.
- a drainpipe from a power plant.
- runoff from cropland.
- an oil leak from a home furnace.

Nonpoint sources of pollution include all of the following except:
- pesticides dispersed by airplane and wind onto a crop.
- beach litter from fishing boats.
- a smokestack from a power plant.
- fertilizer runoff from neighborhood lawns.
- runoff from cropland.
The effects of pollutants include all of the following except:
- disruption of the health, survival or activities of humans and other organisms.
- degradation of life support systems for humans and other organisms.
- creation of unpleasant noise and scents.
- damage to property.
- increasing forests and agricultural land.

Examples of the effects of pollution might include:
- inability to see the top of skyscrapers because of the smog.
- acid rain-induced destruction of a statue in your city park.
- spread of disease from an open dump.
- fish kills in lakes and streams.
- all of these answers

Which of the following is not associated with the pollution cleanup approach?
- It may be overwhelmed by continuing population growth.
- It often transfers pollutants between different parts of the ecosystem.
- It may be very costly once pollutants are dispersed in the environment.
- It is the most economical in the long run.
- all of these answers

Which of the following statements best illustrates the "tragedy of the commons?"
- A factory pollutes a river as much as the law allows.
- Some levels of pollution are life threatening.
- Some activities harm the environment, but others do not.
- Irrigated cropland can be ruined by salinization.
- Cropland can decrease biodiversity.

New efforts to prevent the "tragedy of the commons" could include:
- using common-property resources at or above their sustainable yields.
- using shared resources at rates below their estimated sustainable yields.
- moving from a users pay approach to a taxpayers pay approach.
- deregulating industries that use common-property resources.
- increasing public availability to resources.

An ecological footprint may best be defined as the:
- amount of land and water needed to supply people in a particular area with an indefinite supply of renewable resources.
- amount of land and water needed to absorb and recycle the waste and pollution produced by resource use.
- the environmental impact of people in less developed countries.
- a and b
- none of the above

An ecological deficit is created when:
- a country's ecological footprint is smaller than its biological capacity to replenish its renewable resources and absorb the resulting wastes.
- a country overestimates its spending in the current fiscal year.
- a country depletes its natural capital slower than its biological capacity to replenish its renewable resources and absorb the resulting wastes.
- a country depletes its natural capital faster than its biological capacity to replenish its renewable resources and absorb the resulting wastes.

The country with the largest per capita ecological footprint is:
- USA.
- India.
- Mexico.
- Australia.
- United Arab Emirates.

The country with the largest per capita ecological footprint is:
- USA.
- India.
- Mexico.
- Australia.
- United Arab Emirates.
The country with the second largest per capita ecological footprint is

- USA.
- India.
- Mexico.
- Australia.
- United Arab Emirates.

The country with the world's largest population is

- USA.
- India.
- Mexico.
- China.
- United Arab Emirates.

Time delays in the harmful effects of living unsustainably often cause environmental degradation to build slowly until it reaches a(n)

- sustainable yield.
- ecological tipping point.
- exponential growth.
- ecological footprint.
- environmental worldview.

Ecological tipping point(s), which could result in an irreversible shift in natural systems include(s)

- collapse of fish populations due to overfishing.
- accelerated species extinction due to overhunting.
- pre-mature species extinction due to habitat loss.
- climate disruption due to burning of fossil fuels.
- all of the above.

Which of the following characterizes cultural revolutions?

- decreased food supplies
- increased resource consumption and pollution
- worsening living standards
- shorter life spans
- lower average per capita GNP

Which of the following characterizes sustainability revolutions?

- decreased food supplies
- increased resource consumption and pollution
- worsening living standards
- reducing our ecological footprint
- rejecting the principles of sustainability

Which of the following major cultural changes to Homo sapiens has not intensified environmental degradation?

- Hunter-gatherer civilization
- Agricultural revolution
- Industrial-medical revolution
- Information-globalization revolution

All of these cultural changes have led us to intensify environmental degradation.

The human population currently totals

- 87 million.
- 3.8 billion.
- 4 billion.
- 6.9 billion.
- 10 billion.
According to a number of environmental and social scientists, four basic causes of environmental degradation are poverty, population growth, unsustainable resource use, and failure to include environmental costs in market prices.

Underlying root causes of unsustainable resource use include poverty, population growth, overreliance on renewable energy resources, overexploitation of shared resources, and the inability to meet one's basic survival and education needs.

We can face the challenge of slowing population growth through promoting family planning and elevating the status of women.

Poverty is defined as the inability to live a healthy and productive life.

According to World Bank estimates, how many people live on less than US $1.25 per day?

Your environmental worldview describes your environmental ethic, whether you are a creationist or evolutionist, your perception of the role of Homo sapiens in the universe, your assumptions and values about how the world works and what one's role in the world should be, and your political ideology that defines one's perception of the health of the planet.

An environmental worldview that holds that we can and should manage the Earth for our benefit, but that we have an ethical responsibility to be caring and responsible managers of the Earth, is planetary management.

Which of the following is not a result of being an affluent country?

Poverty is defined as the inability to meet basic survival needs.

Poverty is defined as the inability to meet one's basic survival and education needs.

Poverty is defined as the inability to meet basic survival needs.

Poverty is defined as the inability to meet one's basic survival and education needs.

Poverty is defined as the inability to meet basic survival and education needs.
Question An environmental worldview that holds that we are dependent on nature and our success is dependent on learning how the earth sustains itself and integrating this knowledge into the way we think and act, is

Answer planetary management.
  stewardship.
  environmental wisdom.
  national origin.
  technological.

**Add Question Here**

Question 41 Multiple Choice 0 points

Question Which worldview is most consistent with the status quo in the United States?

Answer Planetary Management
Biocentric
Stewardship
Humility
Environmental Wisdom

**Add Question Here**

Question 42 Multiple Choice 0 points

Question Of the following behaviors, the one that runs counter to the three principles of sustainability is

Answer recycling of materials.
  reusing materials.
  producing and consuming anything people are willing to buy.
  initiating a tree planting drive in your community.
  relying more on renewable sources of energy.

**Add Question Here**

Question 43 Multiple Choice 0 points

Question Of the following actions, the one that does the least to sustain the Earth is

Answer protecting Earth’s biodiversity.
  controlling human population growth.
  utilizing renewable resources wherever possible.
  increasing our dependence on nonrenewable resources.
  decreasing our dependence on nonrenewable resources.

**Add Question Here**

Question 44 True/False 0 points

Question Environmental science is an interdisciplinary study that integrates the humanities and natural sciences.

Answer True
False

**Add Question Here**

Question 45 True/False 0 points

Question Environmental science is the same as environmentalism.

Answer True
False

**Add Question Here**

Question 46 True/False 0 points

Question Life on earth has sustained itself over billions of years even during long periods of cooling and warming of the earth’s surface.

Answer True
False

**Add Question Here**

Question 47 True/False 0 points

Question Natural capital = Natural resources + Natural services

Answer True
False

**Add Question Here**

Question 48 True/False 0 points

Question Natural capital degradation is a by-product of economic development.

Answer True
False

**Add Question Here**

Question 49 True/False 0 points

Question When a nonrenewable resource is completely exhausted, it is referred to as economically depleted.

Answer True
False

**Add Question Here**

Question 50 True/False 0 points
Question 51  True/False  0 points
Question Sustainability begins at a personal level.
Answer ✓ True   False

Question 52  True/False  0 points
Question Forests, aluminum deposits and natural gas are all examples of renewable resources.
Answer True ✓ False

Question 53  True/False  0 points
Question Pollution cleanup is considered a short-term solution if population and consumption levels grow without corresponding improvement in pollution control technology.
Answer True ✓ False

Question 54  True/False  0 points
Question The per capita ecological footprint is the availability of productive land and usable water to support the population with no consideration for environmental impact.
Answer True ✓ False

Question 55  True/False  0 points
Question The world’s more developed countries contain relatively small populations, use large proportions of resources and produce the largest proportions of waste.
Answer True ✓ False

Question 56  True/False  0 points
Question Rapid population growth and poverty are reflective of developing countries and have little impact on pollution.
Answer True ✓ False

Question 57  True/False  0 points
Question Population growth has declined since the 1960’s.
Answer ✓ True   False

Question 58  True/False  0 points
Question Decreasing population growth in developed countries will decrease resource consumption.
Answer ✓ True   False

Question 59  True/False  0 points
Question 83 million people were added to the earth in the year 2010. This is an average of 1.6 million new people on earth each month.
Answer True ✓ False

Question 60  True/False  0 points
Question An environmentally sustainable society must be based on policies which provide for economic growth and development.
Answer True ✓ False

Question 61  True/False  0 points
Question Developing countries have a significant negative effect on the environment because of the consumption per person and technological impact per unit of consumption.
Answer True ✓ False
Question 62  True/False  0 points
Question Developed countries have a significant negative effect on the environment because of the consumption per person and technological impact per unit of consumption.
Answer ✓ True
                      False

Question 63  True/False  0 points
Question Economic growth provides more goods and services whereas economic development uses economic growth to improve living standards.
Answer ✓ True
                      False

Question 64  True/False  0 points
Question The "tragedy of the commons" refers to lack of agricultural sustenance available for the common (poor) people in a country.
Answer True
                      ✓ False

Question 65  True/False  0 points
Question An environmentally sustainable society will require most middle income American workers to decrease their consumption of products.
Answer ✓ True
                      False

Question 66  True/False  0 points
Question In the United States the air quality is poorer and drinking water more polluted today than in the 1970s.
Answer True
                      ✓ False

Question 67  True/False  0 points
Question When a country's GDP decreases, the per capita GDP must also decrease.
Answer True
                      ✓ False

Question 68  True/False  0 points
Question There are a number of strategies and tools available to conserve rather than degrade or destroy the planet’s capital
Answer True
                      ✓ False

Question 69  Fill in the Blank  0 points
Question The three principles of sustainability are ____________________, ____________________ and ____________________.
Answer relying on solar energy, biodiversity, nutrient cycling
                      relying on solar energy, biodiversity, nutrient cycling

Question 70  Fill in the Blank  0 points
Question Dealing with conflicts between scientific solutions and political solutions usually involves ____________________.
Answer making trade-offs

Question 71  Fill in the Blank  0 points
Question A social movement dedicated to protecting Earth's life support system for all living things is called ____________________.
Answer environmentalism

Question 72  Fill in the Blank  0 points
Question The highest rate at which we can use a renewable resource indefinitely without reducing its available supply is called its ________________.
Answer sustainable yield

Question 73  Fill in the Blank  0 points
Question A resource such as water that is renewed continuously is called a(n) ________________.
Answer renewable resource

Question 74  Fill in the Blank  0 points
Question Non-renewable resources include ________________ sources such as oil and natural gas that cannot be recycled.
Answer energy
Question 75  Fill in the Blank  0 points
Question A chemical dumpsite would be an example of a ____________________ pollutant.
Answer point source

Question 76  Fill in the Blank  0 points
Question The consequences of volcanic eruptions and burning coal are ____________________ and ____________________.
Answer air pollution; global warming
Answer global warming; air pollution

Question 77  Fill in the Blank  0 points
Question Installing runoff curtains in a construction site is an example of ____________________ pollution control.
Answer output

Question 78  Fill in the Blank  0 points
Question Reducing the packaging on manufactured goods is an example of ____________________.
Answer pollution prevention

Question 79  Fill in the Blank  0 points
Question The action of processing plastic or aluminum cans into another usable product is called ____________________.
Answer recycling

Question 80  Fill in the Blank  0 points
Question Old soda bottles that are collected, washed, and refilled are an example of ____________________.
Answer reuse

Question 81  Fill in the Blank  0 points
Question ________________ are not owned by a single person or organization, but are degraded by many people.
Answer Common-property resources
Answer Free-access resources

Question 82  Fill in the Blank  0 points
Question ________________ is a possible solution to the problem of people exploiting a free-access resource, but it may not be practical for global common resources.
Answer Private ownership

Question 83  Fill in the Blank  0 points
Question One way to deal with degradation of common property is to use shared renewable resources at or below its estimated ________________.
Answer sustainable yield

Question 84  Fill in the Blank  0 points
Question Some analysts refer to an eventually unsustainable addiction to buying more and more stuff as ____________________ .
Answer affluenza

Question 85  Fill in the Blank  0 points
Question The United States, Canada, and Japan are examples of ____________________ with a high average per capita GDP.
Answer developed countries

Question 86  Fill in the Blank  0 points
Question Developing countries have a low ____________________, which poses a threat to their ability to become environmentally sustainable.
Answer GDP

Question 87  Fill in the Blank  0 points
Question Your ____________________ refers to the set of assumptions and values a person holds with regard to his or her role in the world.
Answer environmental worldview

Question 88  Fill in the Blank  0 points
Question ____________________ is the ability of the environment to function indefinitely in an optimally healthy state.
Answer Environmental sustainability

Question 89  Essay  0 points
What does this graph say about the world's percentage of resource-use in developed countries?

**Answer**
Developed countries' populations use about 88% of the world's resources.

---

Do you think that the numbers overlap in the graph of the percentage of the world's population who lack access to basic amenities? Why?

**Answer**
Often times the effects of poverty are not isolated. Also, the total percentage of the world’s population without access to these amenities is greater than 100%.

---

Do you think that the numbers overlap in the graph of the percentage of the world's population who lack access to basic amenities? Why?

**Answer**
Often times the effects of poverty are not isolated. Also, the total percentage of the world’s population without access to these amenities is greater than 100%.
How many Earths are we currently using compared to Earth’s ecological capacity?

Answer: 1.25

What will happen if humanity’s ecological footprint continues to be greater than Earth’s ecological capacity?

Answer: Humans will destroy their environment, more and more animal and plant species will be lost, poverty and disease will increase, etc.

Is China’s total ecological footprint greater than that of India’s?

Answer: yes

What does the difference in ecological footprint between China and India mean?
China's overall effect on the environment is more severe than that of India's.

Question 95  Essay  0 points
Question What are the four (4) basic causes of environmental problems?
Answer population growth, wasteful and unsustainable resource use, poverty, and failure to include the environmental costs of goods and services in their market prices.

Question 96  Essay  0 points
Question Describe the environmental wisdom worldview and provide an example.
Answer "we are part of and totally dependent upon nature and that nature exists for all species, not just us. It also calls for encouraging environmentally friendly forms of economic growth and development and discouraging Earth-degrading forms. Our success depends on learning how life on Earth sustains itself and on integrating environmental wisdom into the ways we think and act." Examples will vary.

Question 97  Essay  0 points
Question List the three scientific principles of sustainability and give an example of each.
Answer Reliance on solar energy, biodiversity and nutrient cycling. Examples will vary.

Question 98  Essay  0 points
Question How does environmentalism differ from environmental science or ecology?
Answer Environmentalism is a social movement toward protecting earth's life systems that is practiced more in the political and ethical arenas whereas environmental science practiced in the science arena.

Question 99  Essay  0 points
Question Why does the search for scientific solutions to sustainability problems often involve conflicts?
Answer Scientific solutions most times do not involve political solutions. Trade-offs or compromises become necessary in order to implement scientific solutions through political processes.

Question 100  Essay  0 points
Question Make an argument supporting the statement that individuals matter in making the shift toward environmental sustainability?
Answer Sustainability begins with our daily choices. It only takes 5-10% of the population in a community to bring about major change in a relatively short time frame.

Question 101  Essay  0 points
Question Although the poor have limited access to resources, they still have an overall high environmental impact. Explain why this statement is true.
Answer The large number of poor that are preoccupied with daily sustenance do not focus on long term environmental issues, which leads to environmental degradation.

Question 102  Essay  0 points
Question Poverty can increase environmental degradation; however, environmental degradation can increase poverty. Why is this so?
Answer Poor people may be less concerned about environmental issues since they are preoccupied with daily existence. However, the poor are severely impacted by environmental degradation since they have less access to adequate sanitation and health care facilities.