

Chapter 2 - Humans and the Resources of the Earth: Sources and Sinks

Multiple Choice Questions

1. Soil contains which of the following?
 - a. microbes
 - b. organic materials
 - c. inorganic materials
 - d. a, b, and cANS: d
PG: 34
2. Javier has increased productivity on his land by using modern, intensive agricultural techniques. Javier is most likely to be doing which of the following?
 - a. rotating crops
 - b. contour plowing
 - c. terracing
 - d. producing monoculture crops without rotationANS: c
PG: 35
3. Soil experts now estimate that _____ of the world's soil that has ever existed has been lost.
 - a. one fourth
 - b. one third
 - c. two thirds
 - d. three fourthsANS: b
PG: 35
4. According to Harper, which of the following are ways to protect the fertility of cropland soils?
 - a. use recycled human waste as fertilizer
 - b. use chemical fertilizers
 - c. plant only one crop per field
 - d. deep plowingANS: a.
PG: 37
5. According to Harper, which of the following uses the most water?
 - a. industry
 - b. agriculture
 - c. cities
 - d. private suburban residencesANS: b
PG: 37

6. According to Harper, it takes _____ tons of water to produce one ton of grain.
- 10
 - 100
 - 500
 - 1,000
- ANS: d
PG: 37
7. Which region is most likely to erupt in “water wars”?
- the American southwest
 - Central Africa
 - the Middle East
 - Southeast Asia
- ANS: c
PG: 39
8. Which of the following forests are the largest?
- boreal forests
 - temperate zone forests
 - tropical zone forests
 - primeval forests
- ANS: a
PG: 41
9. Forests provide which of the following services?
- soil conservation
 - salmon habitats
 - flood prevention
 - all of the above
- ANS: d
PG: 42
10. There have been _____ waves of species extinction in the history of the planet.
- two
 - three
 - four
 - five
- ANS: c
PG: 43
11. According to conservation biologists, the acronym HIPPCO stands for:
- Habitat building, Investments, Propagation, Population, Climate change, and Optimism
 - Harmful practices, Investments, Propagation, Population, Climate change, and Optimism
 - Habitat destruction, Invasive species, Pollution, Population, Climate change, and Overharvesting
 - Harmful practices, Inventions, Propagation, Population, Climate change, and Overexpansion
- ANS: c
PG: 44

12. _____ is the greatest threat to all kinds of wild species.
- a. The greenhouse effect
 - b. Modern agriculture
 - c. Habitat destruction
 - d. none of the above
- ANS: c
PG: 44
13. Taxol, a compound from the Yew tree, is used:
- a. to treat breast cancer.
 - b. as an ingredient in petroleum.
 - c. to relieve pain.
 - d. to reduce hypertension.
- ANS: a
PG: 45
14. Which of the following countries has the highest per capita paper consumption?
- a. Canada
 - b. China
 - c. the U.S
 - d. India
- ANS: c
PG: 47
15. Which of the following produces the largest percentage of solid waste?
- a. industry
 - b. mining, oil, and gas production
 - c. municipal garbage
 - d. sewage
- ANS: b
PG: 49
16. _____ is the fastest growing solid waste problem in the U.S.
- a. Paper
 - b. E-waste
 - c. Plastic bottles
 - d. none of the above
- ANS: b
PG: 49
17. Which of the following is true of chemical pollution?
- a. DDT is currently used on most American croplands.
 - b. Organophosphates are not as toxic as previously-used herbicides.
 - c. The World Health Organization estimates that 20,000 agricultural workers die each year from pesticide exposure.
 - d. None of the above are true.
- ANS: c
PG: 50

18. _____ refers to the accumulation of synthetic agrochemicals in living tissues through various levels of food chains.
- a. Cultural entrophication
 - b. Bioaccumulation
 - c. Salinization
 - d. Leachate
- ANS: b
PG: 50
19. Long-term irrigation of soil leads to _____ of soil.
- a. Salinization
 - b. Hypoxia
 - c. Eutrophia
 - d. none of the above
- ANS: a
PG: 51
20. _____ is the most publicized solution to reduce the solid waste stream.
- a. Incineration
 - b. Reuse
 - c. Recycling
 - d. Salinization
- ANS: c
PG: 52

True/False Questions

1. Human wastes and effluents go into sinks.
- a. True
 - b. False
- ANS: True
PG: 34
2. Land/soil can become useless for human cultivation.
- a. True
 - b. False
- ANS: True
PG: 34
3. Food, especially grain production, has rapidly increased in the past few years.
- a. True
 - b. False
- ANS: False
PG: 35
4. The U.S. is one of a few nations to make soil conservation a national priority.
- a. True
 - b. False
- ANS: True
PG: 35

5. The recharge rate for groundwater, lakes, and rivers is the primary determinant of the volume of water available for human use.
- a. True
 - b. False
- ANS: True
PG: 37
6. Human beings need about 50 liters of water per day for drinking, cooking, and washing.
- a. True
 - b. False
- ANS: False
PG: 37
7. When water tables sink in coastal regions, salt water may seep in and make groundwater unsuitable for human consumption.
- a. True
 - b. False
- ANS: True
PG: 37
8. Aquifer depletion affects renewable and fossil aquifers in the same way.
- a. True
 - b. False
- ANS: False
PG: 38
9. Since 1975, the U.S. per capita use of water has continued to increase at a dramatic rate.
- a. True
 - b. False
- ANS: False
PG: 38
10. Water conflict played a role in the 1967 Arab-Israeli war.
- a. True
 - b. False
- ANS: True
PG: 38
11. Urbanization is one reason why reforestation has taken place in Europe and the United States.
- a. True
 - b. False
- ANS: True
PG: 41
12. Experts estimate that all tropical forests will be gone sometime between 2020 and 2090.
- a. True
 - b. False
- ANS: True
PG: 41

13. Forests shape the sunlight reflectivity of the earth.
a. True
b. False
ANS: True
PG: 42
14. Coral reefs, unlike other ecosystems, are not considered to be threatened with extinction.
a. True
b. False
ANS: False
PG: 42
15. Habitat destruction is the greatest threat to biodiversity.
a. True
b. False
ANS: True
PG: 44
16. The greenhouse effect affects weather patterns, but has little effect on biodiversity.
a. True
b. False
ANS: False
PG: 44
17. While bats are vital for maintaining plant diversity, they have been shown to present a serious health threat to humans.
a. True
b. False
ANS: False
PG: 47
18. The United States successfully recycles at least 90% of its packaging waste.
a. True
b. False
ANS: False
PG: 47
19. Synthetic agrochemicals are also known as persistent organic pollutants (POPs).
a. True
b. False
ANS: True
PG: 50
20. Salt represents a serious form of chemical pollution.
a. True
b. False
ANS: True
PG: 51

Essay Questions

1. Compare and contrast common solutions to solid waste problems.
2. Identify and discuss two problems associated with growing water use.
3. Discuss trends in tropical deforestation and their consequences.
4. List and discuss three human causes of declining biodiversity.
5. Discuss three reasons why we should care about declining biodiversity. Provide concrete examples to illustrate your points.
6. Identify and discuss three specific initiatives to preserve forests and biodiversity. Provide concrete examples to illustrate your points.