

Chapter 17 & 21 Review Questions**Chapter 17**

1. Describe the potential risks from exposure to trace amounts of hormone mimics such as bisphenol A.
2. What is a pathogen?
3. Define infectious disease, transmissible disease, and nontransmissible disease; give an example of each.
4. In terms of death rates, what are the world's four most serious infectious diseases?
5. Distinguish between an epidemic and a pandemic of an infectious disease.
6. Describe the causes and possible solutions for the increasing genetic resistance to commonly used antibiotics.
7. Define emergent diseases and describe the threat from the West Nile virus.
8. Describe the threat from malaria for 40% of the world's people and how we can reduce this threat.
9. Give three examples of problems being studied within the new field of ecological medicine.
10. What are two ways in which people have exposed themselves to such threats?
11. What is a toxic chemical?
12. Discuss the threat from PCBs.
13. Distinguish among mutagens, teratogens, and carcinogens, and give an example of each.
14. Describe the human immune, nervous, and endocrine systems and give an example of a chemical that can threaten each of these systems.
15. Describe the toxic effects of the various forms of mercury and ways to reduce these threats.
16. What are hormonally active agents, what risks do they pose, and how can we reduce these risks?
17. Define toxicology, toxicity, dose, and response.
18. Give three reasons why children are more vulnerable to harm from toxic chemicals than are adults.
19. Describe how the toxicity of a substance can be estimated by testing laboratory animals, and discuss the limitations of this approach.
20. What is a dose-response curve?

Chapter 21

21. Describe the problems associated with electronic waste (e- waste- Core Case Study).
22. Distinguish among solid waste, industrial solid waste, municipal solid waste (MSW), and hazardous (toxic) waste and give an example of each.
23. Distinguish among waste management, waste reduction, and integrated waste management.
24. Distinguish among reducing, reusing, and recycling in dealing with the waste we produce.
25. Distinguish between primary (closed- loop) and secondary recycling, and give an example of each.
26. What is a materials-recovery facility?
27. What is composting?
28. Describe the processes of recycling of paper and recycling of plastics and explain their advantages.
29. What are bioplastics?
30. What are the major advantages and disadvantages of recycling?
31. Describe three ways to encourage recycling and reuse.
32. What are the major advantages and disadvantages of using incinerators to burn solid and hazardous waste?
33. Distinguish between open dumps and sanitary landfills.
34. What are the major advantages and disadvantages of burying solid waste in sanitary landfills?
35. What is integrated hazardous waste management?
36. Explain the connection between cell phones and African lowland gorillas.
37. Discuss the problems involved in sending e-wastes to some less-developed countries for recycling.
38. Describe three ways to detoxify hazardous waste.
39. Distinguish between bioremediation and phytoremediation?
40. What are the major advantages and disadvantages of (1) incinerating hazardous wastes; (2) disposing of liquid hazardous wastes in (a) deep under-ground wells and (b) surface impoundments?
41. Describe the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation, and Liability (or Superfund) Act, the Toxic Release Inventory.
42. What is a brownfield?
43. What is environmental discrimination and environmental justice?
44. Describe how the Basel Convention regulates hazardous wastes and controls persistent organic pollutants.