

Unit 6 #1 - Chapter 19 - Air Pollution Reading Questions

Questions 1-9 due Friday, 3/17. Questions 10-22 due Tuesday, 3/21

1. How can lichens be used to detect air pollutants?
2. Distinguish between air pollution, primary air pollutants and secondary air pollutants.
3. Make a chart like the one below and fill it in.

Air Pollution	Major Human Sources	Harmful Effects
Carbon monoxide		
Nitrogen oxides		
Sulfur dioxide		
particulates		
ozone		
Volatile organic compounds		
radon		

4. The EPA won a supreme court case since the publishing of this book that allows it to list CO₂ as a pollutant. Why is this so controversial?
5. How does photochemical smog form?
6. How does industrial smog form?
7. List three factors that can reduce air pollution and three that can increase it.
8. What is a temperature inversion?
9. What's up with Asia's giant brown cloud?
10. What is acid deposition and what are its major components and causes?
11. What are some the major harmful effects of acid deposition?
12. In general, characterize the problem of acid deposition in the United States.
13. List 3 ways to prevent acid deposition and 2 ways to clean it up.
14. According to the EPA, what are the three most dangerous indoor air pollutants in the United States?
15. Summarize the problems of indoor pollution from (a) formaldehyde and (b) radioactive radon gas.
16. About how many people die prematurely each year from exposure to air pollutants in (a) the United States and (b) the world? What percentage of these deaths occurs in developing countries? What percentage of these deaths is the result of indoor air pollution?
17. What is the Clean Air Act, and how has it helped reduce outdoor air pollution in the United States?
18. List two positive and two negative aspects about the effectiveness of the Clean Air Act in reducing outdoor air pollution in the United States.
19. According to environmentalists and some health scientists, what are some of the weaknesses of the current Clean Air Act in the United States?
20. What is an emissions trading policy, and what are the advantages and disadvantages of using this approach to help reduce air pollution?
21. List the major prevention and cleanup methods for dealing with air pollution from: (a) emissions of sulfur oxides, nitrogen oxides, and particulate matter from stationary sources (b) automobile emissions (c) indoor air pollution.
22. List a couple of ways to prevent outdoor & indoor air pollution.