

Environmental Science Study Guide

Environmental Hazards and Human Health

Vocabulary

Understand and be able to apply each of these terms.

1. Non-transmissible Disease –
2. Infectious Disease –
3. Parasite -
4. Fungi –
5. Protozoa –
6. Bacteria –
7. Viruses –
8. Prions –
9. Emergent Disease –
10. Zoonosis –
11. Allergens –
12. Neurotoxins –
13. Endocrine hormone disruptors –
14. Water-soluble –
15. Oil-soluble –
16. Bioaccumulation –
17. Biomagnification –
18. Persistence –
19. Acute effects –
20. Chronic effects -

Critical Thinking

Be able to read, analyze, and give complete answers to questions like these.

1. Understand some of the historical methods of treating illness, like the Miasma Theory, Bloodletting, and Water Therapy. What basic understanding was missing with these types of ideas?
2. Why are AIDS, SARS, Swine Flu, and the Spanish Flu of 1918 considered zoonosis? Why are these types of diseases so dangerous to humans?
3. Explain what characteristics of bacteria make them able to evolve so quickly.
4. Give examples of different ways antibiotics are used and misused that promote antibiotic resistance.
5. What dietary factors can lead to cardiovascular disease?
6. What effects do heavy metals most often have on the human body? What about BPA and phthalates from plastics?
7. Know the difference between mutagens, teratogens, and carcinogens. Give an example of each.
8. Indoor air quality is often worse than outdoor air. What types of contaminants are found in indoor air?
9. What is LD50, and how is it measured?
10. What is more toxic, a compound with a high LD50 or a low LD50 value?
11. Explain what risk assessment is. What criteria is used to determine what environmental hazards should be handled first?