

AP Environmental Science, Summer Assignment – 2011

Mrs. Carolyn Brownsberger
cbrownsberger@belmont.k12.ma.us

Two parts:

Part A: Due on first class meeting

Read: Carson, Rachel. Silent Spring (with an introduction by Vice President Al Gore). Houghton Mifflin Company: New York, 1994 (first published 1962). Write a 4-5 page, typed, single-spaced review including a thoughtful introduction, comprehensive conclusion, and thorough answers to the following questions (type the question within the report, then answer):

1. How does Carson classify modern insecticides? What are the differences between the two largest groups?
2. How is the ingestion and accumulation of DDT and other insecticides possible even when foods directly treated with these chemicals are avoided?
3. What is *potentiation* and how does it pose a threat to living organisms?
4. Why does Carson compare the proliferation of synthetic chemical pesticides to a “smooth super highway on which we progress with great speed?”
5. Describe some specific examples of “biological control” methods that have been attempted since the publication of *Silent Spring*. How effective are these methods? Why? Include your citations.
6. Why does Carson use biologist Carl P. Swanson’s metaphor of science as a river to explain the science of “biological control” in America?
7. What responsibility does Carson believe scientists have to the public?
8. *Silent Spring* helped lead to a ban on the use of DDT in the United States. What made Carson’s book so persuasive?

Part B: Due September 9 (if drop day, due 9/8)

Miller, G. Taylor, Jr. Living in the Environment: Principles, Connections, and Solutions, 13th Edition.

Notes and review questions:

Please take **comprehensive** notes for each chapter as the first quiz will include these chapters.

Chapter 1 – Environmental Issues, Their Causes, and Sustainability;
Review questions 2, 5, 6, 9, 12, 14, 16, 18, 21

Chapter 2 – Environmental History: An Overview;
Review Questions 1, 3, 5, 7, 10, 12, 13, 15, 16, 20

Rubric: The review questions must be answered in complete sentences and should stand on their own; i.e. someone reading your answers will understand your responses without knowing the question. Ask yourself, “What else can I add to make this response complete?”