

Environmental Science Summer Enrichment Assignment 2017-2018

Due 2nd day of class → Google Classroom

100 points

Read *Silent Spring* by Rachel Carson (ISBN# 0618249060 or 9780618249060)

Directions: Read *Silent Spring* by Rachel Carson and then answer questions included below. Your answers must be typed, using 12-pt font, Arial or Times New Roman, double spaced and submitted to Google Classroom prior to the second full day of classes. Late assignments will not be accepted. We will discuss the text during the first week of class and after the discussion there will be an essay test on the book *Silent Spring*.

PART 1 - Introduction

Read former Vice President Al Gore's introduction to *Silent Spring* at:

<http://clinton2.nara.gov/WH/EOP/OVP/24hours/carson.html>

Read Chapter 1 of *Silent Spring*.

Answer the following Questions:

1. When *Silent Spring* first came out, Carson faced fierce opposition. Why, according to Al Gore, would people try to refute her research, and how did they try to do it?
2. Contrast Rachel Carson and Al Gore's view of humans' relationship with nature with the views of Carson's opponents. With whom do you agree and to what degree?
3. Using specific passages for support, explain what Al Gore thinks of the impact that Carson's book had on the world.
4. What did you learn about pesticide use, politics, and food growth from reading Gore's introduction?
5. What did this reading assignment teach you about the power of writing?
6. Obviously the issues that Carson raised in *Silent Spring* have not gone away. What do you feel you can do as a citizen to become part of a solution to these problems?

PART 2 – Reading and Understanding

Read the rest of the book *Silent Spring*. (This will take some time – pace yourself...maybe one chapter per night). Answer the following questions.

1. Carson's first chapter explains the title of her book. Why is it called "Silent Spring"?
2. Why does she suggest that chemical insecticides and herbicides be called "biocides"? What idea is she expressing by using this word? Is Carson opposed to the use of all toxins?
3. What is uniquely problematic about DDT and other chlorinated hydrocarbons?
4. How do toxins contribute to water pollution?

5. "In nature nothing exists alone" (p. 51). Why is this an important part of Carson's critique? How would you characterize her view of the many relationships in nature: between human beings and their environments, between plants and animals, between water and earth?
6. What alternatives does Carson propose to the use of chemicals to control unwanted pests and plants? Do you think these alternatives make sense in the context of agribusiness?
7. Her description of chemical spraying suggests that moral dilemmas are involved in the use of toxins as well as technical problems of environmental management. What moral dilemma is Carson worried about? Do you share her view?
8. Carson's discussion of Dutch Elm disease leads her to advocate "the conservation of variety." What does she mean by this?
9. Why is runoff in rivers and the ocean such a serious problem?
10. What lessons does Carson extract from the stories about spraying for the gypsy moth and the fire ant? What was the role of local activists? Of government officials? Of the chemical industry?
11. Carson describes the kitchen and the garden as poisoned places. What particular implications do these observations have for women? Do you think Carson was aware of these?
12. What is Carson referring to when she writes that there is a "human price" for the use of toxins? Why is it so crucial that human beings begin to see themselves as an essential part of the natural world? Why did she believe that people resisted thinking about themselves in those terms?
13. Carson invokes the term "ecology" (p. 189) to describe "the web of life—or death..." What role does this concept play in her analysis?
14. Carson describes the possibility of genetic damage by environmental hazards as something new. She also discusses cellular damage caused by environmental carcinogens, an especially poignant example because Carson herself died of breast cancer. Do you think of these as novel, even controversial theories? Why or why not?
15. Carson defines the balance of nature at the beginning of chapter 15 on p. 246. Read her definition and explain its major features in your own words.
16. Do you agree that the project of controlling nature is arrogant, foolish, and dangerous, as Carson argues? Why or why not?
17. After reading *Silent Spring*, how would you characterize its author? Is she a science writer? An environmental activist? A philosopher?