

Summer Reading assignment for APES 2017-2018
READ and ANSWER QUESTIONS on SILENT SPRING

STUDENTS: PLEASE DO NOT PRINT YOUR ANSWERS OFF ON PAPER. ALL ANSWERS SHOULD BE **DIGITALLY SUBMITTED/EMAILED** TO ME AT carothersa@mhusd.org

Title your assignment as "Summer.Assignment-Firstname.lastname" and submit prior to the first day of school in August.

THIS ASSIGNMENT IS DUE PRIOR TO THE FIRST DAY OF SCHOOL!

***It will not be accepted after 8:00am on the first day unless a doctor's note is given. With a note it is due the day you come to school and NOT THE DAY AFTER.

Directions. After you complete the book *Silent Spring*, by Rachel Carson, please answer the following questions. Please try to include specific examples in your answers and form your answers in grammatically correct paragraphs or sentences. There is no specific length for a "good" answer, but each answer should completely address the question. You should be able to answer almost all of the questions in a paragraph or two. A good source for excellent essay answer writing can be found at: http://www.collegeboard.com/student/testing/ap/prep_free.html#envsci

This assignment is supposed to introduce you to early environmental issues. Rachel Carson wrote about issues happening during her life that she saw as hazardous to humans and animals, and the environment in general. This book will help jump start you on the APES curriculum, give you some background as to the start of the environmental movement, and hopefully engage you in the material emotionally! I will be grading the summer assignment! **I will grade based on the depth and detail of your reflection answers.**

This assignment is to be completed by you, without the help of others. You are not permitted to use the work of other students, web sites, study guides, notes or any work that is not entirely generated by you reading *Silent Spring* and generating answers in your own mind and then recording those answers for this assignment. Use citations from the text in your answers! **Treat this as a literature analysis- like you would do in English class!**

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If you have questions, please contact me at carothersa@mhusd.org and I will get back to you within a few days.

Chapter Questions for analysis:

Chapter One: “A Fable for Tomorrow”

- 1) Explain how the title of the book can be derived from Chapter One.

Chapter Two: “The Obligation to Endure”

- 1) How long does it take for life to adjust to natural environmental hostilities?
- 2) How do human produced pollutants differ from natural environmental chemicals?
- 3) Why does Carson believe insecticides should be called biocides?

Chapter Three: “Elixirs of Death”

- 1) How were chemical pesticides originally discovered and used?
- 2) What are some of the dangers of the use of arsenic?
- 3) Explain how DDT is passed on and concentrated in a food chain.
- 4) Describe the dangers of the chemical known as ‘dieldrin’.
- 5) What is “potentiation” and why is it a serious hazard?
- 6) What is a systemic insecticide and how does it work?
- 7) What does a mutagen do?

Chapter Four: “Surface Waters and Underground Seas”

- 1) Describe some ways that insecticides can inadvertently enter human water supplies.
- 2) How can city water supplies from reservoirs be inadvertently poisoned by humans?

Chapter Five:

- 1) Give some specific examples of how some pesticides can affect the beneficiary components of the soil.

Chapter Six:

- 1) How do humans judge the value of a plant?
- 2) What is happening to the sage plant community out west and why?
- 3) Describe some methods of biological control that are safer than chemicals.

Chapter Seven.

- 1) Describe the impact of Sheldon, Illinois’ Program of Pest control
- 2) What are the advantages of biological control of the Japanese Beetle?

Chapter Eight

- 1) Explain the connection between the demise of the elm tree and the disappearance of birds in North America.
- 2) Explain the research results of John Mehner on robins at Michigan State University.
- 3) Discuss why spraying elm trees to “protect” them actually ended up hurting them.
- 4) Make a comparison between the 1959 Parathion assault in river bottomlands of Southern Indiana and the current suburbia assault on residential lawns.

Chapter Nine

- 1) What were the pros and cons of the Fire Ant Eradication Program?

Chapter 10

- 1) How did DDT affect the milk supply in the US?
- 2) How did Sales Bonanza use the fire ant issue to increase their sales?
- 3) How did the agricultural department in Texas get farmers to use chemicals?

Chapter 11

- 1) What is Carson referring to when she writes that there is a human price for the use of toxins?
- 2) Why is it so crucial that human beings begin to see themselves as an essential part of the natural world?
- 3) Why did she believe that people resisted thinking about themselves in those terms?

Chapter 12

- 1) Carson invokes the term ecology (p189) to describe the web of life – or death... What role does this concept play in her analysis?

Chapter 13

- 1) Do you agree that the project of controlling nature is arrogant, foolish, and dangerous, as Carson argues? Why or why not?

Chapter 14.

- 1) After reading Silent Spring, how would you characterize its author? Is she a science writer? An environmental activist? A philosopher?

Chapter 15.

- 1) Explain how Carson thinks “Nature Fights Back.” What examples does she offer to support this idea?

Chapter 16

- 1) How are Darwin’s ideas of survival of the fittest so well illustrated by Carson’s observations on the effects of pesticides?

Chapter 17

- 1) Explain what alternatives are available to chemical insecticides. Why are these alternatives more ecologically sound?

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In education, we are continually studying the ideas of others. It is important, in our speaking and writing, that we acknowledge these ideas and give credit where it is due. **Plagiarism is using other people's ideas and words without clearly stating the source of that information.** Plagiarism and cheating are serious offenses and will be punished accordingly.

The following are examples of plagiarism and cheating:

1. Copying someone else's assignment or allowing someone else to copy your assignment.
2. Substituting synonyms for someone else's word choices or restating someone else's ideas in your own words.
3. Handing in another individual's work as your own.
4. Dividing questions on an individual assignment so that several students answer a portion of the assignment, permitting each other to copy answers. Although group work and cooperative learning are often encouraged, individual assignments must remain the work of the individual student. **Always ask your teacher if an assignment may be completed with others. Do not assume it is allowed.**
5. Copying sentences, phrases, paragraphs, or pages from books, web sites, or other sources **without providing documentation.** Writing should be either original or attributed.
6. Using plots, characters, theories, opinions, concepts, designs, and even ideas from other sources (people, books, films, music recordings, television, or any other media) and present them as original work without properly attributing them.
7. Taking answers from a classmate's quiz or test paper, using a crib sheet or sharing answers during a testing situation.
8. Falsifying data, conclusions, and answers and presenting them as fact.

A useful site to help you determine if you are plagiarizing: <http://www.plagiarism.org/>

Plagiarism and cheating have no place in the academic arena. The following penalties will apply for such actions:

The student(s) will earn a zero on the assignment, project, or test. The student(s) who contributed to the offense (i.e. shared information or answers) will also earn a zero, whether or not the student benefited personally from the information. Parents or guardians will be notified, and both the administration and the appropriate counselor(s) will be informed.