

## AP Biology Summer Assignment

6/9/20

Welcome to AP Biology! Please visit my Bio blog at <http://lphsbiology.blogspot.com/> for any and all information for this course.

Each year, I challenge myself to find a current book related to biology, read it and create a meaningful assignment for you. This year, I have found one of my favorites of all time; I hope you learn a lot and are inspired by the stories. You will need to purchase, or loan through a library, a copy of the book, *The Serengeti Rules* by Sean B. Carroll. **You should start the assignment soon, spending an hour or two each week. It is not something you can or should cram. I look forward to seeing your work in progress.**

Please create a Google Slide Presentation in our Google Classroom. All of your work is to be in this one Google Slide Presentation. *FYI – Google Slides is a useful place to document your work. This assignment isn't really a presentation, so most of your slides will just be text and more like a document.*

You are expected to do your own work. If you are even thinking about taking shortcuts, please **DO NOT TAKE THIS COURSE!** **Please do not share your work with anyone but me. If you do, you will be immediately removed from this course.**

1. Read the **Introduction** and choose two things that were most notable to you (something you learned, or liked, or didn't like, or you found impressive or shocking, etc.) and discuss.
2. **Chapter One** - Make a list of ten key thoughts, connections, or discoveries Walter B. Cannon made about the fight-or-flight response and homeostasis. (Ten total combined)
3. **Chapter Two** - First (& second), choose two things that were most notable to you (something you learned, or liked, or didn't like, or you found impressive or shocking, etc.) and discuss. Third, choose one of the following -
  - a. Find maps of the places visited by Elton in this chapter and write a narrative summarizing his journey, or
  - b. Choose one species mentioned and do additional research about it. List ten interesting things about it and the best picture you can find.

*Include links to your sources for a. or b.*
4. **Chapter Three** - First, write a paragraph about Monod's experiments with bacterial growth (What did he test and what did he find out?) Second, list five basic facts about enzymes (from the chapter). Lastly, explain/discuss what is being shown in Figure. 3.6 in your own words.
5. **Chapter Four** - Make a list of eight facts about cholesterol from the chapter. Second, choose one other thing from this chapter that was notable to you (something you learned, or liked, or didn't like, or you found impressive or shocking, etc.) and discuss.

6. **Chapter Five** - First, what is CML? Second, choose any five observations or discoveries about CML to highlight from this chapter. Third (& fourth), choose two things that were most notable to you (something you learned, or liked, or didn't like, or you found impressive or shocking, etc.) and discuss.
7. **Chapter Six** - Choose any experiment mentioned in this chapter and summarize it (how was it conducted and by whom, and what were the results/conclusions?) Make sure to mention "keystone species" and "trophic cascade" in your summary. Watch this 20-minute [video](#) that has the same title as this chapter. It is awesome.
8. **Chapter Seven** - Choose and discuss any two surprising discoveries/observations about the Serengeti.
9. **Chapter Eight** - Choose one of the ecological hiccups from this chapter to discuss (how did humans disrupt the food chain and what were the effects). What should we learn from situations like these?
10. **Chapter Nine** - Using information from the chapter, explain the cause and effect relationships and/or ecological discoveries behind the illustrations in Figure 9.2 and photographs in Figure 9.4. Watch this five-minute [video](#) too.
11. **Chapter ten** - your choice (**choose one**)
  - a. Write a summary
  - b. Create a timeline showing major events and how the park has changed over time. You could do this by hand and take pictures of it to insert.
  - c. Create a mini - project on Gorongosa National Park with pictures and information. Include links to your sources.
  - d. Create a piece of artwork based on something from the chapter, take a picture of it to insert, and provide a caption explaining it.
12. **Afterword** - How was smallpox eradicated? Why did the author include a recount of this monumental task in this book? (What was the context?)

Good Luck! This assignment is due on or before Monday, August 31st.

If you have any questions, please email me and I will get back to you as soon as I am able.

Sincerely,

Mrs. Damp

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