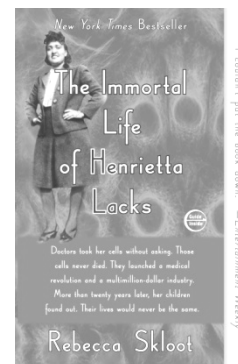


AP Biology Summer Assignment for 2022-2023

Part 1 –READING

Read the book, *The Immortal Life of Henrietta Lacks* by Rebecca Skloot. It is the story of Henrietta Lacks and the immortal cell line, known as HeLa, that came from cells removed from her in 1951. Although it is an interesting story (New York Times #1 bestseller), we will be reading it mostly for the science. I believe you will learn more about cells, medicine, cancer, etc. from reading this story than from a textbook. So, read and enjoy the book! Just to ensure that you make time for it, we will have a quiz over the book when school starts. As most of you know, I am not about memorizing the details, so the quiz will be over the bigger story, the science, or the shocking information you will only know if you read it. In the past, those who read the book found the quiz easy, those who did not really read it (or only read the cliff notes watched the movie), failed. If you have questions or comments that can't wait until school starts, feel free to e-mail me, clbennett@briarcrest.com. One last thing, as you read, be aware that Mrs. Lack's daughter has some interesting views about God, the supernatural, and immortality. Think about what the bible says and what you believe, to decide if you agree or disagree with her.



Part 2 –BINGE WATCH NATURE PROGRAMS

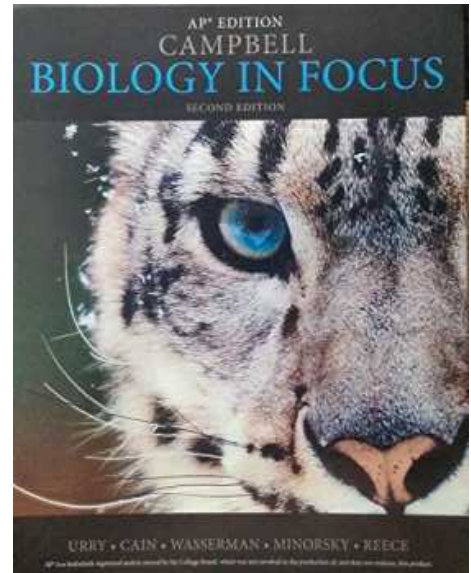
For this part of your summer assignment, you will be familiarizing yourself with vocabulary that we will be using at different times throughout the year. On the next page is the list of terms.

1. **Look over the vocabulary on the next page. Look up words you are not familiar with.**
2. **Then, watch episodes of BBC's "Life". There are 10 episodes. Watch as many as you can. They are on Amazon Prime for a small cost and I believe, Discovery+ for free. Or you may watch "Our planet", "Life in Color", or "Life on our Planet" on Netflix, just be aware it may be more difficult to find your examples there.**
3. **As you watch, look for examples of the vocabulary on the next page. As you find them, jot them down.**
4. **You will need 20 examples. Each example is worth 2 points. One for the definition of the word, one for the example and the episode it was found in.**

Example: A modified leaf of a plant is a leaf-like structure whose job is not photosynthesis like a normal leaf. Tendrils are an example of a modified leaf. In episode 9, plants, Passion vine tendrils are seen wrapping around structures to help the plant reach light.

Do not use the same example more than once. Enjoy the episodes!

NOTE: You can get the definition of all of these words from your textbook. Our textbook is “Campbell, Biology in Focus, 2nd edition, AP edition”. Buy it early if you want to save money!



BIOLOGY VOCABULARY ASSIGNMENT TERMS

1. abiotic vs biotic factors
2. adaptation of an animal or plant
3. altruistic behavior
4. amniotic egg
5. analogous structure
6. archaeobacteria vs eubacteria
7. autotroph
8. Batesian mimicry
9. Biodiversity
10. carrying capacity
11. chitin
12. coevolution
13. commensalism
14. convergent evolution
15. detritivore
16. divergent evolution
17. ectotherm vs endotherm
18. exoskeleton
19. genetic variation within a population
20. heterotroph
21. homologous structures
22. intersexual vs intrasexual selection
23. interspecific vs intraspecific competition
24. invasive species
25. keystone species
26. K-strategist
27. littoral zone organism
28. logistic growth
29. modified leaf of a plant
30. modified root of a plant
31. modified stem of a plant
32. Mullerian mimicry
33. mutualism
34. mycelium
35. mycorrhizae
36. natural selection
37. niche
38. parasitism
39. pheromone
40. pollen
41. population
42. predation
43. r-strategist
44. saprophyte
45. seed dispersal (animal, wind, water)
46. spore
47. succession
48. symbiosis
49. taxis
50. territorial behavior
51. tropism
52. vestigial structures