

Houston Academy for International Studies, 9th grade, Pre-AP Biology Summer Assignment

The Hot Zone by Richard Preston

Hello Dear Freshmen,

I cannot wait to see you and meet you in person in August 😊. Here is your Summer assignment. You need to buy a book, *The Hot Zone by Richard Preston* (it's only \$8.99 on Amazon). It's worth every penny 😊. You need to read the book and choose 2 questions from each part and answer them. Please type in your answers on Word with a font of 12 and double spaced. Make sure to put in the headings for each part (for example as Part 1 and so forth)

The summer writing assignment will be graded based on following directions, clarity of writing, style, effective use of source material from the book, scientific accuracy, and content (addressing all parts of the questions).

*****This assignment will be due during the first week of school*****

Part 1: (Choose any 2)

1. Ebola is likened to both nuclear radiation and a "molecular shark" in the book. Explain why in detail.
2. Read the following passage from the book: "Then, two weeks after the incident with the bloody glove, something frightening happened in the Ebola rooms. The two healthy monkeys developed red eyes and bloody noses, and they crashed and bled out. They had never been deliberately infected with Ebola virus and they had not come near the sick monkeys. They were separated from the sick monkeys by open floor." Describe why this observation is so significant and the impact it had on later precautions used with Ebola.
3. What did Nurse Mayinga do before she was finally checked into a hospital that concerned individuals around the globe? Why exactly did everyone panic?
4. When Johnson took his crew to Kitum cave, they placed many "sentinel animals" around the opening of the cave and in various parts of the cave. What is the purpose of these animals? Why did they pose some problems for Johnson at the end of the investigation?

Part 2: (Choose any 2)

5. When Tom Geisbert (the microscope guy) was studying the virus from the monkey house sample he reacted as follows..."His stomach screwed up into a knot and turned over, and he felt an unpleasant sensation. The puke factors. He almost panicked..." Why did he react so strongly?
6. What is the Slammer? What is its purpose and what effect can it have on individuals who must spend time there?
7. There was a lot of conflict about how to handle the outbreak in the monkey house. Explain some of the factors that made the decisions about how to deal with the situation so heated.
8. Nancy Jaxx and C.J. Peters carried out a potentially illegal action during the chapter entitled "Garbage Bags" determining that some Army lawyer would be able to argue that their action was "so completely legal that there had never even been any question about it." What did they do and why did they decide to risk it?

Part 3: (Choose 2)

9. Describe how the decon team could be almost certain that "For a short while, until life could re-establish itself there, the Reston Primate Quarantine Unit was the only building in the world where nothing lived, nothing at all."

10. At the end of this section, many people were starting to feel relief about the severity of the Ebola Reston strain since it did not seem to be infectious in humans. However, Ebola Reston is still classified as a Level 4 hot agent and many people are concerned about its future. Describe why individuals are still concerned about the virus.

11. You are an 18yr old 91-Tango. Knowing just what you know about viruses and the immune system and what they were told entering their assignment, would you take on the Monkey House mission? Why or why not? Under what circumstances?