**SOMETHING IN THE FOREST**

1. Who is Charles Monet? Describe his history and habits.

2. The author uses “as if” regularly in the first page, as if he is trying to draw comparisons to more familiar settings. Keep track of this literary

device as you keep your journal.

3. What happens to Monet? Describe.

4. (pages 4-6) The author uses a sensory image of hot and cold in describing the case. Why does he create this disequilibrium?

5. The author makes a distinction between lethal and nonlethal contagion. What is the difference?

6. Describe the behavior of weaverbirds and what makes them interesting.

7. Why were workers burning the fields? What impact does this have on the migration of microbes and the natural biodiversity of an area?

8. What is the importance of the reference to Monet’s “women friends”?

9. Find Mt. Elgon on a map and downloads a picture of this ecological terrain.

10. Go to the American Museum of Natural History’s rainforest exhibit site and find photos of the species listed on page 9.

11. How big is Kitum Cave? What are the characteristics of Kitum Cave as a natural habitat?

12. Why is salt so “precious” in the rainforest?

13. How does wood petrify?

14. Why does the author take the time to describe the crystals so precisely?

15. as of page 13, list three possible sources of infection from the cave.

16. How did the pillar in the cave get scored and marked? How does this realization contribute to the mood of life in the cave?

17. Why do you think the author uses a reference about the pull of the cave” being like gravity”?

18. List the symptoms, feelings, and progression of the disease as it struck Monet.

19. List all the contacts Monet had, from symptoms to death. Then list the next three people each of those contacts might have had. How many possible infections do you have in this scenario?

20. Why don’t antibiotics work on viruses?

21. How does the ease of plane travel make us more susceptible to infection?

22. What is the relevance of the East Rift Valley in early human history? What famous skeleton(s) were found there?

23. How could you mix up a bag of the black sputum as described on page 17?

24. Connective tissue is one of four types of tissue in our bodies. What are the other three?

25. Monet vomits even though his stomach is empty. What does this tell you?

26. What is the reference to “hot” in this sequence?

28. What does it mean for his bloodstream to “throw clots”?

29. What is a stroke?

30. Why is he not feeling pain at this point?

33. What if Monet had crashed and "bled out" on the plane? What might some of the consequences have been? Write a one-page safety manual for flight attendants or other airline personnel for a scenario like this.

34. Monet goes from a plane to a taxi. Continue this chain of infection to consider how it might spread.

36. What does it mean for Monet to have “sloughed his gut”?

37. The toxic agent has an active voice as the chapter ends. What is it doing?

38. Is the agent that killed Charles Monet a character in The Hot Zone? If it is a character, what sort of a character is it and what role does it seem to play?

**JUMPER**

39. Describe some of the tools the doctor uses on Monet to find out what is wrong. What is the flaw in his procedure?

40. What happened to Dr. Shem Musoke, who worked on Charles Monet? How could this have been prevented?

41. What is the range of normal blood pressure? What do the two numbers represent?

42. What is the condition and tone of Monet’s tissue and blood vessels at this point? How does this impact their ability to treat him?

43. Describe the kidneys and liver during the autopsy.

44. How do the results and findings relate to the symptoms of connective tissue damage?

45. Compare Dr. Musoke’s symptoms with Monet’s.

46. Dr. Musoke is concerned that he might have malaria. How do the symptoms of malaria compare to the ones he is experiencing?

47. What did Dr. Musoke do that contributed to the spread of the disease? What would you have done?

48. Describe the findings of the exploratory surgery performed on Dr. Musoke.

49. What is hemophilia and how would the symptoms compare to the ones described in this chapter?

50. How does dialysis work and why would it be appropriate here?

51. Why did Dr. David Silverstein purify the serum? What is this?

52. Where did he send the samples? Why?

53. What is the significance of the title of this chapter?

**DIAGNOSIS**

54. Who is Dr. David Silverstein? What kind of practice does he have?

55. Why did he treat Dr. Musoke with “supportive care?” What do you think this means?

56. What was the diagnosis for Dr. Musoke? What is the history of this virus?

57. In the original home of the virus, what % of the monkeys were infected?

58. What does it mean to “jump species”? What are some more common examples of this?

59. Who was the first victim of Marburg virus and how many people did the 1967 outbreak affect? What was the fatality rate?

60. What everyday shape is the virus particle of Marburg compared to in the book?

61. What are some of the other main shapes of viruses?

62. Is a virus alive or not? How would you define life? What are the characteristics of a virus that make it seem NOT alive? What characteristics does a virus have that make it seem alive?

63. Use the links page in this guide and go to the Tulane Big Picture book of Viruses. Find photos of the virus families described.

65. What are the two types of Ebola?

66. Describe the recovery period and problems from Marburg. What are some of the surprising organs attacked?

67. Page 39—the author lists four possible intermediate hosts. Make the case for or against any two of them.

68. What was Mr. Jones’ business? How big was it? 69. In that business, how were the products inspected and what was the problem? Recommend three improvements in this system.

70. Mr. Jones feels guilty about the outcome. Should he accept blame for what happened? Why or why not?

71. What was being done with the sick monkeys? Why was this dangerous?

72. What is the WHO? What do they do?

73. What is the science of epidemiology? What is the root word structure of this field?

75. You are the minister of the interior for the nation of Uganda. Write a 5-step policy to manage a situation like this.

76. Research the species origins of AIDS. How does this compare to the description of Ebola in this book?

78. How did the mixture of monkey samples and species contribute to the hypothesis about HIV being a hybridized, or mixed-origin virus?

79. What was Silverstein’s response to finding out about the Marburg diagnosis?

80. Why does the author compare Charles Monet to “an Exocet missle struck below the water line”?

81. What is Shem Musoke’s recollection about his illness? Any lingering symptoms?

**A WOMAN AND A SOLDIER**

82. Describe Nancy Jaax, who is she? Describe her job, house, family, location.

83. The author sometimes changes the narrative point of view as he’s telling the story. How is the narrative point of view different between the description of Charles Monet and the description of Nancy Jaax?

84. How much education do you need to become a vet? Why does the Army need vets?

85. What was Nancy’s hobby/activity and how did this help her confidence?

86. Nancy is a meticulous cleaner and Jerry is impulsive. How does this set up the story about finding disease agents?

87. Nancy cuts herself in the kitchen. How does this foreshadow the events to come, and what kind of reaction and emotion does it signify on her part?

**PROJECT EBOLA**

89. Why do you think Nancy got up so early?

90. What was Nancy’s specialty in the lab?

91. Why does the author describe the location and ventilation system at USAMRIID?

92. What do the initials USAMRIID stand for? What other nicknames does the place have?

93. How did the USAMRIID mission change in 1969?

94. Would you locate this facility here? Why or why not?

95. What are two examples of the lethal microorganisms being worked on at USAMRIID? What are the fears of these agents?

96. Describe the characteristics of the four levels of BSL.

97. What was Nancy’s job in Gene Johnson’s lab?

98. Why does she have to do autopsies very quickly in Ebola cases?

99. What were some of the other agents Nancy had worked on and had vaccinations for? Pick three and get pictures and describe their ecology (living conditions and symptoms).

100. Why was Nancy so determined to get to level 4?

101. Anthrax is quite deadly. Why is it referred to as “safer” than Ebola?

102. Who is Gene Johnson? Describe his personality and some

surprises about him. What makes an expert like him so afraid of viruses?

103. Page 64—draw a food web of Central Africa as described here, showing the relationships among the organisms listed in this passage.

104. Why does Gene Johnson have nightmares about airborne Ebola?

What are the other vectors, or transmission paths, of infections (airborne is one method)?

105. Describe the viral family tree, and some of the cousins to Ebola.

106. Research and describe the protein sequence of Ebola—since the book was written it has been completely sequenced and dissected as a particle.

107. Which system is attacked first? Why is this important?

108. How do HIV and Ebola compare in their transmission?

109. What is the relevance of the practice if cleaning up dead bodies for burial?

110. Exchange letters between Jerry and Nancy about the perils and opportunities of working in level 4.

111. Why did Nancy take off her rings before entering the lab?

112. How does UV light act as a sterilizing agent?

113. Diagram the steps of containment as Gene and Nancy progress through the different levels.

114. What is the value of the pressurized suit?

115. Why are gloves portrayed as the most important part of the defense against Ebola?

116. What are some people’s superstitions in dealing with level 4?

117. What is the decon shower for?