

**Extra Credit Reading**  
*THE GHOST MAP*

Name: \_\_\_\_\_

1. Describe trash and refuse disposal in 1840's London.
2. Who began the August 1854 cholera outbreak in the Soho neighborhood of London?
3. When were the first written accounts of cholera recorded?
4. What are the symptoms of cholera?
5. What causes cholera?
6. What was cholera's "lucky break" that enabled it to successfully infect human populations?
7. Why is evolution faster in bacteria?
8. What is the cure for cholera?
9. What was John Mow's contribution to the early understanding of pain killers?
10. What were the two main theories about how cholera was transmitted?
11. What evidence did Snow have that cholera was transmitted via water?
12. What three factors lead to the population explosion in metropolitan London after 1750?
13. How did tea drinking lead to an increase in England's population?
14. What was Farr's "correlation vs. causation" mistake?
15. How has drinking alcohol served as a selective pressure in human evolution?
16. What did Florence Nightingale think caused cholera?
17. How did natural selection lead to the human characteristic of avoiding putrid odors?
18. In terms of the senses of smell and sight, why was it easier to think cholera was airborne rather than water borne?

19. What happened to the cholera bacteria that were in the Broad St. Pump?
20. What is an “Index Case?”
21. What is “confirmation bias?”
22. Why might cholera still pose a threat in the future of “mega cities?”
23. Why do people who live in modern cities have longer life expectancies than people who live in rural areas?
24. Why are modern cities better for Earth’s environment than rural living?
25. What is transgenic shift?
26. Did you like this book? Why or why not?
27. What did you learn about the scientific process by reading this book?