

**Supplemental Reading**  
*RIDDLED WITH LIFE*

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

1. How did organelles arise?
2. What is co-evolution?
3. Humans are bipedal. What does this mean, and what are some of the pros/cons of bipedalism?
4. What is negative pleiotropy?
5. Describe the “behavioral fever” of an ectotherm.
6. What are the costs and benefits of a fever?
7. How has agriculture influenced the prevalence of disease in human populations?
8. What are the effects of cystic fibrosis, and why has the faulty gene that causes it remained in the population?
9. Create a table of common diseases on a separate sheet of paper and attach it.
10. What is the hygiene hypothesis?
11. If you were suffering from Crohn’s disease, would you volunteer for “worm therapy?” Why or why not?
12. How many different kinds of microbes inhabit your intestinal tract? Why are they called commensals?
13. What is “probiotic” treatment?
14. What is virulence?
15. Why were Australian rabbits exposed to myxomatosis?
16. What are the two concerns about the current bird flu threat?
17. List example organisms that can reproduce without sex.

18. What is genetic recombination?
19. What is the Red Queen hypothesis, and how does it explain sexual reproduction?
20. If the Red Queen hypothesis is true, why do a small number of asexual species still exist?
21. What is “vertical transmission” of a disease?
22. What organisms, besides humans, can have STDs?
23. How have the symptoms of syphilis changed through time? Why?
24. What ecological and physiological differences lead to males having a shorter life span than females?
25. What is sexual dimorphism, and in what type of social groups is it often found?
26. What two explanations did Darwin propose for the presence of elaborate “secondary sexual traits” such as the peacock’s tail?
27. What relationship did the author find between the bird’s plumage coloring and the number of parasites?
28. What is the difference between cell-mediated and humeral immune response?
29. What is the relationship between red coloration and the immune system?
30. For what were the first vaccinations?
31. What is geophagy? What organisms do it?
32. How do some nesting animals prevent fleas and bacteria from invading their nests?
33. What evidence is there that chimps are able to “self medicate?”
34. What is the definition of an “emerging infection?”

35. How does antibiotic resistance evolve in bacteria?
  
36. Why does the use of regular soap and alcohol-based cleaning products NOT lead to resistance?
  
37. How might a bacterial infection lead to OCD?
  
38. Of all the examples of parasitic manipulation, which do you think is the creepiest? Why?
  
39. Did you like this book? Why or why not?
  
40. What did you learn about the scientific process by reading this book?